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Database: IBM Technical Disclosure Bulletins**Search:**

L11

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PATENT INFORMATION

PATENT NO.	KIND DATE	APPLICATION NO. DATE
WO 9629417	A1 19960926	WO 1996-US3486 19960315
W1 AI, AM, A1, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DE, FI, ES, PL, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LU, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI P W, KE, US, MW, SD, SZ, UG, AL, BE, CH, DE, DK, ES, FI, FR, GB, GR,		
IE, IT, LU, MC, NL, PT, SE, BE, BJ, CF, CG, CL, CM, GA, GN US 5614191	A , 19970325	US 1995-404685 19950315
CA 2215122	AA 19960926	CA 1996-2215122 19960315
AU 9653110	A1 19961008	AU 1996-53110 1996-315
AU 7145451	B2 20000106	
EP 1007696	A1 20000614	EP 1996-909693 19960315
R : AT, BE, CH, DE, DK, ES, FR, GB, GR, IL, LI, NL, SE, MC, PT, IE, FI		
JP 2000511042	T2 20000829	JP 1996-528499 19960315
US 5919456	A 19990706	US 1997-821840 19970321
PRIORITY APPLN. INFO.:		US 1995-404685 A 19950315
		WO 1996-US3486 W 19960315

AB - A method and compns. are provided for specifically delivering an effector mol. to a tumor cell. The method involves providing a chimeric mol that comprises an effector mol. attached to a targeting mol. that specifically binds an interleukin-13 (IL-13) receptor and contacting a tumor cell with the chimeric mol. The target moiety of the chimeric mol. may consist of IL-13, an anti-IL-13 receptor antibody, or circularly permuted IL-13; the effector moiety may be a cytotoxin (*Pseudomonas exotoxin*, Diphtheria toxin, ricin, or abrin), label, radionuclide, drug, liposome, ligand, or antibody. Thus, recombinant DNA technol. was used to produce single-chain fusion proteins human IL-13 (or its circularly permuted analog) to either

of 2 mutant forms of *Pseudomonas aeruginosa* exotoxin A. Circularly permuted IL-13 is a deriv. in which the normal N- and C-termini are linked via the Gly-Gly-Ser-Gly linker peptide, and the bond between Gly-43 and Met-44 is broken, thereby yielding cplI-13 in which Met-44 is the new N-terminus and Gly-43 is the new C-terminus. PE38QQR is a truncated form of *Pseudomonas* exotoxin composed of amino acids 253-364 and 381-608; the lysine residues at positions 509 and 606 are replaced by Gln and at 613 is replaced by Arg. P34L is a full-length *Pseudomonas* exotoxin with a mutated and inactive binding domain where amino acids 57, 246, 247, and 249 are replaced by glutamate. The fusion protein IL-13-PE38QQR targets the IL-13 receptor on human renal cells and is highly cytotoxic to cells expressing high nos. of IL-13 receptor. Because resting or activated immune cells or bone marrow cells are not sensitive to IL-13-toxin, this toxin is useful for the treatment of renal carcinoma cells without being cytotoxic to normal immune cells. Human glioma cells, medulloblastoma, and Kaposi's sarcoma are also highly sensitive to the IL-13-PE38QQR, as well as to the anti-toxins cplI-13-PE38QQR, IL-13-PE41, and cplI-13-PE41.

129. ANSWER 10 OF 11 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1996-352885 CAPLUS
DOCUMENT NUMBER: 125-31750
TITLE: IL-13 released by and localized in human basophils
AUTHORS: Li, Huamin; Sun, Tommy C.; Alati, Ruchel
CORPORATE SOURCE: Department Internal Medicine, University Texas Medical Branch, Galveston, TX, 77555, USA
SOURCE: Journal of Immunology (1996), 156(12), 4833-4838
CODEN: JOMIA3, ISSN: 0022-1767
PUBLISHER: American Association of Immunologists
DOCUMENT TYPE: Journal
LANGUAGE: English
AB - We and others have shown that human basophils can synthesize and release

IL-3, and A23187 in a dose-dependent manner. PBMC, neutrophils, and eosinophils isolated from the same donors did not release IL-13 after anti-IgE stimulation. The anti-IgE-induced basophil IL-13 synthesis could be enhanced by IL-3 preincubation (with and without IL-3 preincubation). anti-IgE-induced IL-13 prodn. was 227 and 42 pg/100 basophils, resp. PBMC produced a significant amt. of IL-13 upon stimulation with PHA, but a low level of IL-13 in response to A23187 and/or PMA. Eosinophils and neutrophil did not produce IL-13 when cultured with A23187, IL-5, and anti-Fc epsilon RI alpha. This is the first demonstration of IL-13 prodn. by basophils. Our data suggest that basophils, in addition to secreting mediators, can represent an important source of proallergic cytokines

129. ANSWER 11 OF 11 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1997-30117 CAPLUS
DOCUMENT NUMBER: 126-103048
TITLE: Interleukin-13, in combination with anti-interleukin-12, increases graft prolongation after portal venous immunization with cultured allogeneic bone marrow-derived dendritic cells
AUTHORS(S): Gorczyński, Reginald M.; Cohen, Zane; Fu, Xin-Ming; Hua, Zeng; Sun, Yonglong; Chen, Zhiqi
CORPORATE SOURCE: Departments Surgery and Immunology, University Toronto, Toronto, M5G 2C4, Can.
SOURCE: Transplantation (1996), 62(11), 1592-1600
CODEN: TRPLAU, ISSN: 0041-1337
PUBLISHER: Williams & Wilkins
DOCUMENT TYPE: Journal
LANGUAGE: English

AB - Portal venous (pv) transfusion before transplant with large nos. (~100 times 10⁶) of irradiated multiple minor histocompatible spleen cells (B10.Br) augments allogeneic skin graft survival in C3H mice. We have shown in earlier studies that this is correlated with preferential activation for prodn. of type 2 cytokines (interleukin [IL]-4 and IL-10) and decreased prodn. of type 1 cytokines (IL-2 and interferon [IFN] gamma). We have also shown that recombinant rIL-12, in assoc. with anti-IL-10 monoclonal antibody, can reverse in vivo the graft prolongation afforded by pv immunization and the altered cytokine prodn. that follows. Adoptive transfer of inhibition of graft rejection is possible at early times after pv immunization, using plastic adherent cells obtained from the liver of treated mice. We show that within 4 days of pv immunization dendritic cells (SLDC-145+) isolated from the thymus, mesenteric lymph node (MLN), and spleen of mice receiving MH_c-incompatible cells grafts (C3H with C57BL/6), can transfer skin graft prolongation to naive C3H recipients. Moreover, 5-times 10⁶ cultured dendrite cells derived from 10-day cultures of C57BL/6 bone marrow also confer increased graft survival after pv immunization, but not after i.v. immunization. Once again, increased graft survival with cultured dendrite cells was assoc. with polarization of T cells that were isolated from treated mice to produce IL-4 and IL-10 on restimulation *in vitro*. Graft survival and polarization in cytokine prodn. was further enhanced by simultaneous administration of anti-0-12 monoclonal antibody, rIL-13, or more significantly, a combination of anti-IL-12 and rIL-13. These alterations were assoc. with persistence of donor cells in various tissues of recipient mice, as assessed using polymerase chain reaction for expression on the IL-13R^{alpha}A⁺ female recipient of male bone marrow. Our data suggest that a combined strategy of donor-specific immunization before transplant, at certain portion of cytokine levels, *in vivo* may prove an effective regimen.

130. ANSWER 12 OF 16 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2002-696137 CAPLUS
DOCUMENT NUMBER: 137-231354
TITLE: Method for constructing expression cassette of a chimeric interleukin 13 (IL-13) vaccine and therapeutic uses
INVENTOR(S): Ahiman, Claire; Crowe, James Scott; Ellis,

GL, GL,
GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK,
LR,
LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO,
NZ, OM, PH,
PL, PT, RO, RU, SD, SE, SG, SI, SK, SU, TI, TM, TN, TR, TT,
TZ,
UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG,
KZ, MD, RU,
TJ, TM,
RW, GH, GM, KE, LS, MW, MZ, SD, SI, SZ, TZ, UG, ZM, ZW,
A3, BF, CH,
CY, DE, DK, EN, FI, FR, GB, GR, IE, IL, LU, MC, NE, PT, SE,
TR,
BE, BJ, CF, CG, CL, CM, GA, GN, GQ, GW, ML, MF, NE, SN,
TD, TG
PRIORITY APPLN. INFO.: GB 2001-5360 A 20010303
AB - The present invention provides a method for constructing expression cassette of a chimeric interleukin 13 (IL-13) vaccine in which the sequence of the predicted antigenic loops has been taken from murine IL-13, and the sequence of the predicted structural (predominantly helical) regions has been taken from human IL-13. The present invention relates to an isolated polypeptide useful for immunization against self-antigens. In particular the invention relates to a self-protein that is capable of raising auto-antibodies when administered *in vivo*. The invention particularly relates to rendering human cytokines immunogenic in humans. The invention further relates to pharmaceutical compns comprising such compds. and their use in medicine and to methods for their produc.

REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD

RECORD: ALL CITATIONS AVAILABLE IN THE REFORMAT

128. ANSWER 2 OF 16 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.

ACCESSION NUMBER: 2002-343936 BIOSIS

DOCUMENT NUMBER: PREV200200343936

TITLE: A monoclonal antibody to mouse IL-13 inhibits acute asthma

response.

AUTHOR(S): Yang, Gaoyun (1); Emmell, Eva (1); Shealy, Dave (1); Griswold, Don (1); Li, Li (1)

CORPORATE SOURCE: (1) Centocor, Inc., 200 Great Valley Parkway, Malvern, PA, 19355 USA

SOURCE: FASEB Journal, (March 20, 2002) Vol. 16, No. 4, pp. A672.

http://www.fasebj.org/print.

Meeting Info: Annual Meeting of the Professional Research Scientists or Experimental Biology, New Orleans, Louisiana, USA April 20-24, 2002
ISSN: 0892-6638.

DOCUMENT TYPE: Conference

LANGUAGE: English

AB - Mouse interleukin 13 (IL-13) is a pleiotropic cytokine mainly produced by

Th2 cells. Over-expression of IL-13 in the lung or treatment of mice with recombinant IL-13 intranasally induced airway hyperresponsiveness (AHR).

mucus gland hyperplasia, coxax production, pulmonary eosinophilia and subepithelial fibrosis. On the other hand, blocking IL-13 using either the IL-13 receptor-Ig fusion protein or polyclonal antiserum in asthmatic mice

significantly inhibited AHR, mucus production, airway inflammation and fibrosis. These results suggested that IL-13 is a key player in asthma pathogenesis; therefore, IL-13 specific monoclonal therapy could provide

therapeutic potential on asthma. To prove the concept, we have developed a

rat anti-mouse IL-13 neutralizing monoclonal antibody and tested its effects on OV A induced acute asthma responses in mice. IL-13 was up-regulated in the lung during OV A induced asthma responses. When administered at the challenge stage, the anti-IL-13 monoclonal antibody significantly inhibited AHR, goblet cell hyperplasia and mucus production.

Furthermore, the antibody treatment also inhibited the production IL-5, IL-6, and coxax in the lung. These results clearly demonstrated that IL-13 plays an important role in asthma responses, and suggest that a monoclonal ***antibody*** to ***IL-13*** would be an effective therapeutic agent in the treatment of asthma.

131. ANSWER 13 OF 16 CAPLUS COPYRIGHT 2002 ACS

TYPE: DOCUMENT

ACCESSION NUMBER: 2002-696137 CAPLUS

DOCUMENT NUMBER: 137-231354

TITLE: Method for constructing expression cassette of a chimeric interleukin 13 (IL-13) vaccine and therapeutic uses

INVENTOR(S): Ahiman, Claire; Crowe, James Scott; Ellis,

GL, GL,
GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK,
LR,
LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO,
NZ, OM, PH,
PL, PT, RO, RU, SD, SE, SG, SI, SK, SU, TI, TM, TN, TR, TT,
TZ,
UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG,
KZ, MD, RU,
TJ, TM,
RW, GH, GM, KE, LS, MW, MZ, SD, SI, SZ, TZ, UG, ZM, ZW,
A3, BF, CH,
CY, DE, DK, EN, FI, FR, GB, GR, IE, IL, LU, MC, NE, PT, SE,
TR,
BE, BJ, CF, CG, CL, CM, GA, GN, GQ, GW, ML, MF, NE, SN,
TD, TG
PRIORITY APPLN. INFO.: GB 2001-5360 A 20010303
AB - The present invention provides a method for constructing expression cassette of a chimeric interleukin 13 (IL-13) vaccine in which the sequence of the predicted antigenic loops has been taken from murine IL-13, and the sequence of the predicted structural (predominantly helical) regions has been taken from human IL-13. The present invention relates to an isolated polypeptide useful for immunization against self-antigens. In particular the invention relates to a self-protein that is capable of raising auto-antibodies when administered *in vivo*. The invention particularly relates to rendering human cytokines immunogenic in humans. The invention further relates to pharmaceutical compns comprising such compds. and their use in medicine and to methods for their produc.

REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD

RECORD: ALL CITATIONS AVAILABLE IN THE REFORMAT

FILE SEGMENT: Priority Journals
ENTRY MONTH: 200209
ENTRY DATE: Entered STN: 20020324
Last Updated on STN: 20020925
Entered Medline: 20020924

AB - OBJECTIVE: To investigate the physiology of interleukin 13 (IL-13) in

rheumatoid arthritis (RA) and the effects of tumor necrosis factor (TNF)

antagonists (etanercept) on the distribution of IL-13 on patients with RA.

METHODS: We measured cytokine levels in RA sera (pre, post etanercept), RA

cytosolic fluid (SF), osteoarthritis (OA) SF, and normal human sera by ELISA. Detection of IL-13 was not influenced by rheumatoid factor, as revealed in spike recovery and isotype antibody control studies.

Biologically active IL-13 in RA SF was studied using dendritic cell (DC)

progenitors that develop into mature DC with IL-13 and with neutralizing

antibodies to ***IL-*** + ***13***. The modulation of IL-13

by etanercept was compared to that of IL-6 and monocyte colony stimulating

factor (M-CSF). The effect of etanercept on the ability of RA sera to promote DC growth was studied using DC progenitors. RESULTS:

IL-13 was increased in RA sera versus normal sera, OA SF, and RA SF. Relative to OA

SF and normal sera, FA SF was enriched in IL-13. The IL-13 contained in FA

samples was biologically active, prompting DC growth from progenitors.

Circulating DC growth activity was strongly reduced by anti-TNF therapies.

Whereas decreases in DC growth factors including IL-13 and IL-6 occurred

with etanercept therapy and were associated with clinical improvement, concurrent increases in circulating M-CSF (a non-DC,

monocyte-specific

growth factor) were noted. CONCLUSION: The increase of biologically active

IL-13 in RA supports the concept that IL-13 regulates immune cell (including dendritic cell) activity and indicates how the varied anatomical distribution of cytokines may play a role in the RA disease process. The differential regulation of circulating IL-13 and M-CSF levels

by TNF antagonists further implies discrete roles in the TNF cytokine network in RA.

128 ANSWER 5 OF 16 CAPLUS : COPYRIGHT 2002 ACS

ACCESSION NUMBER: 2001360036 CAPLUS

DOCUMENT NUMBER: 134365710

TITLE Modulating IL-13 activity using mutated IL-13

molecules that are antagonists or agonists of IL-13

INVENTOR(S): Puri, Raj K.; Oshina, Yasuo; Joshi, Bharat H.

PATENT ASSIGNEE(S): United States Dept. of Health and Human Services, USA

SOURCE: PCT Int Appl: 129 pp.

CODEN: PINXND2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO: KPNR DATE: APPLICATION NO. DATE:

WO 200134645 A2 20010517 WO 2000-US31044 20001110

WO 200134645 A3 20020307

W, AF, AG, AI, AM, AL, AU, AZ, BA, BB, BC, BR, BY, BZ,

CA, CH, CN,

CR, CU, CZ, DE, DK, DM, D, E, ES, FI, GB, GR, GE, GH,

GM, FR,

HU, D, H, I, IS, JP, KE, KG, KR, KZ, L, LK, LR, LS, TR, ES,

LT, LV, MA, MD, MG, MK, MN, MW, MX, MY, NL, NZ, PL,

PT, RO, RU,

SD, SI, SG, SK, SL, TT, TM, TZ, UA, UG, US, UZ,

VN,

YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

EW, GH, GM, F, ES, MW, M, SD, SI, SZ, LZ, UG, ZW, AI,

BE, CH, CY,

DE, DK, ES, FI, FR, GB, GR, GE, IL, LU, MC, NE, PT, SE, TR,

BE,

BJ, CL, CG, CL, CM, GA, GS, GW, ML, MR, NE, SN, TD, EG

AI 2001015993 A 20010606 AI 200115993 20001110

PRIORITY APPN. INFO: US 1999 165236P P 19991111

WO 2000131044 W 20001110

residues at positions 112, 110, 109, 92, 69, or 66 are mutated to a neutrally charged residue, or one with a charge opposite to the charge of

the residue found at that position in native IL-13, provided that the residue at position 12 of the mol. is not neg. charged. The agonists can be used as more potent agents to provoke an effect provided by IL-13

In particular, the agonists can be used as reagents in the maturation of monocytes into dendritic cells, or to pretreat bone marrow stem cell donors to reduce graft vs. host disease in the recipient of the stem cells. Finally, the invention provides IL-13 receptor binding mol.s with affinity for the IL-13 receptor at least about 3 times greater than that exhibited by wild-type IL-13. Also provided are methods and compns. for

specifically delivering an effector mol. to a tumor cell by chimeric mol.s comprising the effector mol. and an IL-13 receptor binding mol., and pharmaceutical compns. comprising such chimeric mol.s.

128 ANSWER 5 OF 16 MEDLINE DUPLICATE 2

ACCESSION NUMBER: 2001255129 MEDLINE

DOCUMENT NUMBER: 23127071 PubMed ID: 11316662

TITLE Decreased steroid responsiveness at night in nocturnal asthma. Is the macrophage responsible?

AUTHOR: Kraft M; Hamid Q; Chrousos G P; Martin R J; Leung D Y

CORPORATE SOURCE: Departments of Medicine and Pediatrics, National Jewish

Medical and Research Center, Division of Pulmonary Sciences and Critical Care Medicine, University of Colorado Health Sciences Center, Denver, Colorado, USA.. kraftm@njhc.org

CONTRIBUTION/MEMBER: AF-41256 (NIAMS)

HL-03343 (NHLBI)

HL-36577 (NHLBI)

RR-00051 (NCRR)

SOURCE: AMERICAN JOURNAL OF RESPIRATORY AND CRITICAL CARE MEDICINE,

162(4) Apr 16(5) 1216-25.

Journal code: 9421642, ISSN: 1073-449X.

PUB COUNTRY: United States

DOCUMENT TYPE: Journal Article; JOURNAL ARTICLE

LANGUAGE: English

FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals

ENTRY MONTH: 200106

ENTRY DATE: Entered STN: 20010611

Last Updated on STN: 20010611

Entered Medline: 20010607

AB As peripheral blood mononuclear cells from patients with nocturnal asthma

(NA) exhibit reduced steroid responsiveness at 4:00 A.M. as compared with

4:00 P.M., we hypothesized that NA is associated with increased nocturnal

airway cell expression of GRbeta, an endogenous inhibitor of steroid action. Ten subjects with NA and seven subjects with nonnocturnal asthma (NN) underwent bronchoscopy with bronchoalveolar lavage (BAL) at 4:00

P.M. and 4:00 A.M. BAL lymphocytes and macrophages were incubated with dexamethasone (DEX) at 10(-5) to 10(-8) M. DEX suppressed proliferation of

BAL lymphocytes similarly at 4:00 P.M. and 4:00 A.M. in both groups. However, BAL macrophages from NA exhibited less suppression of IL-8 and

TNF-alpha production by DEX at 4:00 A.M. as compared with 4:00 P.M. (p < 0.0001), whereas in the NN group DEX suppressed IL-8 and

TNF-alpha production equally at both time points. GRbeta expression was increased at

night only in NA primarily due to significantly increased expression by BAL macrophages (p < 0.0001). IL-13 mRNA expression was increased at night, but only in the NA group and addition of neutralizing

antibody to ***IL-*** + ***13*** reduced GRbeta expression by BAL macrophages.

We conclude that the airway macrophage may be the airway inflammatory cell

driving the reduction in steroid responsiveness at night in NA, and this function is modulated by IL-13.

128 ANSWER 6 OF 16 MEDLINE DUPLICATE 3

ACCESSION NUMBER: 2002068268 MEDLINE

DOCUMENT NUMBER: 21653974 PubMed ID: 11795676

TITLE Childhood asthma as an allergic disease: rationale for the development of future treatment

AUTHOR: Lang M L; Powell C A

CORPORATE SOURCE: Department of Pediatrics, University of Colorado Health Sciences Center, Denver, CO, USA.. langm@njhc.org

Entered Medline: 20020320

AB The fundamental abnormality in asthma is inflammation of the airways.

1-helper 2 (Th2) lymphocytes are the key orchestrators of this inflammation, initiating and propagating inflammation through the release

of Th2 cytokines. Interleukins(IL-4, IL-5 and IL-13, IL-4 and IL-13 promote IgE production by B-cells, mast cell growth and differentiation, and upregulate adhesion molecule expression on vascular endothelium.

IL-4 also promotes differentiation of uncommitted Th0 lymphocytes into Th2 lymphocytes. IL-5 promotes differentiation and recruitment of eosinophils, and activates them to degranulate within tissues, resulting in damage to the respiratory epithelium. Current treatment of childhood asthma relies predominantly on corticosteroids that have nonspecific anti-inflammatory

activity and are associated with potential side-effects. Novel therapies that selectively target the underlying immunopathogenesis hold great promise. Disruption of the Th2 lymphocyte induced allergic inflammatory

response represents a novel approach to selectively inhibiting allergic inflammation at its origin. Possible therapeutic interventions include inhibition of Th2 response (CpG oligonucleotides, vaccination, CIL4Ig

fusion protein, IL-12, IL-10), inhibition of IgE (the anti-IgE antibody rhuMAb-E25 omalizumab, which is undergoing clinical trials), inhibitory

of mediator activity (leukotriene modifiers, which are approved for use in childhood asthma), and targeting Th2 cytokines (soluble IL-4 receptors, IL-5 ***antibody***, ***IL*** + ***13***). Other therapeutic approaches targeting downstream events in the allergic inflammatory cascade are also currently under investigation (chemokine receptors CCR2,

tryptase inhibitors, and inhibitors of cyclic AMP-specific phosphodiesterase 4). CONCLUSION: As we further understand the pathophysiology of asthma, the potential to develop novel treatments increases. This paper addresses current possible new treatments for the future.

128 ANSWER 7 OF 16 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.

ACCESSION NUMBER: 2002186429 BIOSIS

DOCUMENT NUMBER: PREV20020186429

TITLE NFkappaB activation in Hodgkin-Reed-Sternberg-cells can be

decreased by inhibition of interleukin-13-signalling.

AUTHOR(S): Knorre, Alexander (1); Skovnild, Brian F.; Kaiser, Stefan;

Sevald, Walter; Pahl, Heike (1); Mak, Tak W.; Kapp, Ursula

CORPORATE SOURCE: (1) Experimental Anaesthesiology, University Medical Center, Freiburg Germany

SOURCE: Blood, (November 16, 2001) Vol. 98, No. 1; Part 1, pp.

305a; http://www.bloodjournal.org/; print.

Meeting Info: 43rd Annual Meeting of the American Society of Hematology, Part 1 Orlando, Florida, USA December 07-11, 2001

ISSN: 0006-4971.

DOCUMENT TYPE: Conference

LANGUAGE: English

AB The unique cellular background of reactive cells surrounding the rare population of Hodgkin-Reed-Sternberg (HRS) cells in Hodgkin specimen and the systemic clinical symptoms of Hodgkin lymphoma (HL) suggest that cytokines play a role in the pathogenesis of the disease. We have demonstrated previously that interleukin (IL)-13 is strongly expressed and

secreted by some Hodgkin-derived cell lines and also expressed by HRS cells in primary tissue. Specific expression of IL-13 could be found in 25

to 100% of HRS cells in 86% of 36 cases of classical HL tested by *in situ* hybridisation. Furthermore we were able to demonstrate that

proliferation

of the IL-13 secreting cell lines HDLM2 and L1236 can be inhibited by treatment with IL-13 neutralizing antibodies. These findings suggest that

an autoactivating step by IL-13 might be one step in the multistep transformation process of HL. Another pathway that might play a role for

proliferation and survival of HRS cells is activation of NF-kappaB. As opposed to normal B cells constitutive presence of NF-kappaB relA could

be demonstrated in the nucleus of HRS-cells. Here we investigate

whether

IL-13 and IL-13Ralpha1 are expressed in HRS cells and whether the expression is increased in HRS cells compared to normal B cells.

After 48 h of treatment cells were harvested and investigated for nuclear NF-kappaB relA by gel shift and

immunoprecipitation. After 48 h of treatment cells were harvested and investigated for nuclear NF-kappaB relA by gel shift and

proliferation. In HEK293 cell neutralization of IL-13, as well as blockade

of the IL-13 IL-4R leads to a significant loss of nuclear

NF-kappaB relA

In L1236 NF-kappaB activation was not altered by IL-13 neutralization

This study indicates that NF-kappaB relA activation may be linked to IL-13 signalling mediated by the IL-13 IL-4R in HEK-derived cells

Proliferation of the cell line L1236 can be inhibited by IL-13

neutralization without inactivation of NF-kappaB relA, which

suggests

that the proliferative effect of IL-13 on HEK cells might not depend on

NF-kappaB activation

128 ANSWER 8 OF 16 BIOSIS COPYRIGHT 2002 BIOLOGICAL

ABSTRACTS INC.

ACCESSION NUMBER: 2002 129980 BIOSIS

DOCUMENT NUMBER: PR1200200129980

TITLE: Interleukin 13 (IL-13) levels in serum from patients with Hodgkin disease (HD) and healthy volunteers.

AUTHORS: Fumara Paolo (1); Caballadas, Fernando (1); Younes, Atas (1)

CORPORATE SOURCE: (1) Lymphoma Myeloma, M.D. Anderson Cancer Center, Houston, TX USA

SOURCE: Blood, (November 16, 2001) Vol. 98 No. 11 Part 1.

PP:

(29a, http://www.bloodjournal.org, print)
Meeting Info: 43rd Annual Meeting of the American Society of Hematology, Part I Orlando, Florida, USA December 07-11,

2001
ISSN: 0006-4971.

DOCUMENT TYPE: Conference

LANGUAGE: English

AB: Interleukin 13 (IL-13) has recently been found to be highly expressed in cultured Hodgkin disease (HD)-derived cell lines and primary Hodgkin and

Reed-Sternberg (RS) cells. Furthermore, IL-13 has been detected in the supernatants of HD-derived cell lines by enzyme-linked immunosorbent assay (ELISA), and neutralizing ***antibody*** to ***IL-13*** +

IL-4

results in inhibition of RS cell proliferation in vitro. Because of the potential therapeutic implication of these observations, we examined IL-13

levels in serum from patients with newly diagnosed and relapsed HD and

healthy volunteers. Supernatants from 3 HD-derived cell lines (HD-LM2,

L-428, and KMH-2) known to produce IL-13 were used as positive controls.

The sensitivity of the ELISA assay is less than 12 pg/ml. As previously reported, all 3 HD cell lines produced IL-13 (range 85-300 pg/ml). In contrast, IL-13 was below the detectable level in sera from 40 healthy individuals tested. Subsequently, we examined IL-13 levels in sera from 108 newly diagnosed patients with HD (70% had nodular sclerosis histology).

Thirty one (28%) had B symptoms, and 36% had stage III-IV

presentation.

IL-13 levels were elevated in sera from 11 (10%) of 108 patients (range

34

to 82 pg/ml). However, IL-13 levels did not correlate with B symptoms, disease bulk, histologic subtype, advanced Ann Arbor stage, or shorter disease-free survival. Of the 11 newly diagnosed patients who had elevated

serum IL-13 levels, only one patient experienced disease progression 4 months after completing therapy for stage IIIB bulky disease. We also detected IL-13 levels in sera from 31 patients with relapsed HD. Five (16%)

had elevated IL-13 serum levels (range 42 to 48 pg/ml). Our data show for

the first time that IL-13 levels can be elevated in the serum of patients with HD. Although the number of patients with elevated IL-13 levels is small, this does not rule out the possibility of higher concentrations at the disease site. Our data may serve as the basis for new treatment strategies to explore the potential clinical relevance of IL-13 in patients with HD.

128 ANSWER 9 OF 16 WPIIDS (C) 2002 THOMSON DERWENT

ACCESSION NUMBER: 2001-050753 [09] - WPIIDS

DOC NO: CPI-C 2001-023298

TITLE: Treating tissue fibrosis and/or inhibiting formation of tissue fibrosis in a mammalian subject, involves administering a pharmaceutical composition comprising IL-13 antagonist

DOC NO: CPI-C 2001-023298

DK FE ES FIGB GE
GH GM HR HU IL IS JP KE KG KP ER KZ LC T KR TS
LT LU LV MD MG
MK MN MW MX NO NZ PI PT RO RU SD SE SG SISK SI TD
TM IP LT LU AU G
U Z V N YU ZW
AU 2000057561 A 20010109 (200122)

APPLICATION DETAILS:

PATENT NO: KIND APPLICATION DATE

WO 2000078336 A1 WO 2000-US-7102 19990621
AU 2000057561 A AU 2000-57561 20000621

FILING DETAILS:

PATENT NO: KIND PATENT NO

AU 2000057561 A Based on WO 200078336

PRIORITY APPLN. INFO: US 1999-334512 19990621
AN: 2001-080753 [09] - WPIDS
AB: WO 200078336 A UPAB: 20010213

NOVELTY: Treating tissue fibrosis and/or inhibiting formation of tissue fibrosis in a mammalian subject, comprising administering a pharmaceutical composition (C1) comprising a protein (I), or a composition (C2) comprising a molecule (II) which is interleukin (IL) 13 or IL-4 antagonist, is new.

DETAILED DESCRIPTION: Treating tissue fibrosis and/or inhibiting

formation of tissue fibrosis in a mammalian subject, comprising administering a pharmaceutical composition (C1) comprising a protein (I),

or a composition (C2) comprising a molecule (II) which is interleukin (IL)-13 or IL-4 antagonist, is new. (I) comprises a 383 residue amino acid

sequence, (S1), fully defined in the specification, residues 22-334 or 357-383 of S1, a 380 residue amino acid sequence (S2), fully defined in the specification, amino acids 26-341 or 363-380 of S2, or fragments of S1

or S2 having a biological activity of IL-13 receptor binding chain.

ACTIVITY: Cytostatic.
MECHANISM OF ACTION: Inhibitor of tissue fibrosis formation (claimed).

C57BL/6 WT and IL-4 deficient mice were infected percutaneously with

25 Schistosoma mansoni cercariae. Separate groups of animals were treated

with either sIL-13R alpha 2-Fc or with control Fc. The treatments began on

week 5, at the start of egg laying, and all animals were sacrificed 8 week post-infection and examined for several parasitologic and immunologic parameters. All four groups of mice harbored similar worm burdens, and

tissue eggs produced per worm pair did not vary among the groups. At

8 week post-infection, the time of peak tissue response 45, WT mice showed:

no significant change in granuloma size as a result of IL-13 blockade.

Control-Fc-treated IL-4-deficient mice also failed to show a reduced granulomatous response, and in fact, granulomas were significantly larger

in these mice. In striking contrast to these observations, the

IL-4-deficient mice displayed a markedly reduced granulomatous response.

When IL-13 was inhibited, the double IL-4-deficient sIL-13R alpha 2-Fc-treated mice displayed on average a 40-50% reduction in granuloma volume when compared with either control or sIL-13R alpha 2-Fc.

Control-Fc-treated IL-4-deficient mice, and more than a 75% reduction when compared with control-Fc-treated IL-4-deficient mice.

IL-13 is useful for treating tissue fibrosis resulting from infection with schistosoma or from healing of a wound which is a surgical

injury, and/or inhibiting formation of tissue fibrosis which affects tissues such as liver, skin epidermis, skin endodermis, muscle, tendon, cartilage, cardiac tissue, pancreas, lung, uterine tissue, neural tissue, testis, ovary, adrenal gland, artery, vein, colon, small intestine, biliary tract and gut (claimed).

Dwg: 0.7

128 ANSWER 10 OF 16 WPIIDS (C) 2002 THOMSON DERWENT

ACCESSION NUMBER: 2001-024676 [03] - WPIIDS

DOC NO: CPI-C 2001-007458

DK FE ES FIGB GE
GH GM HR HU IL IS JP KE KG KP ER KZ LC T KR TS
LT LU LV MD MG
MK MN MW MX NO NZ PI PT RO RU SD SE SG SISK SI TD
TM IP LT LU AU G
U Z V N YU ZW
AU 2000057561 A 20010109 (200122)

KF ES LT MC MW NI

OA PI SD SE SI SZ TZ UG ZW

W AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE

DK FE ES FIGB GE
GH GM HR HU IL IS JP KE KG KP KR KZ LC T KR TS

LT LU LV MD MG
MK MN MW MX NO NZ PI PT RO RU SD SE SG SISK SI TD

TM IP LT LU AU G
U Z V N YU ZW

AU 2000046805 A 20001110 (200109)

EP 173484 A1 20020123 (200214) EN

R AL AT BE CEE CY DE DK ES FR GB GR IE IL IT LU NL

LV MC MK NL PT

RO SI SI

CN 1348465 A 20020508 (200253)

HU 200200862 A2 20020729 (200258)

KR 2002026426 A 20020410 (200267)

APPLICATION DETAILS:

PATENT NO: KIND APPLICATION DATE

WO 2000064944 A1 WO 2000-US11612 20000428
AU 2000046805 A UPAB: 20000428
EP 1173484 A1 EP 2000-928591 20000428

CN 1348465 A CN 2000-806772 20000428
HU 200200862 A2 WO 2000-US11612 20000428
KR 2002026426 A KR 2001-713820 20011029

FILING DETAILS:

PATENT NO: KIND PATENT NO

AU 2000046805 A Based on WO 200064944
EP 173484 A1 based on WO 200064944
HU 200200862 A2 Based on WO 200064944

PRIORITY APPLN. INFO: US 1999-301808 19990428

AN: 2001-024676 [03] - WPIDS

AB: WO 200064944 A UPAB: 20010116

NOVELTY: Treating or inhibiting formation of tissue fibrosis in a mammalian subject, comprises administering a composition comprising an interleukin(IL) 13 antagonist or an IL-4 antagonist.

ACTIVITY: Vulgarly: The effect of IL-13 inhibitor antagonist such as soluble IL-13R alpha 2-Fc in preventing fibrosis associated with chronic infectious diseases was studied. C57BL/6 WT and IL-4

deficient mice were infected percutaneously with Schistosoma mansoni cercariae. Separate groups of animals were treated with either sIL-13R alpha 2-Fc or control Fc. All animals were sacrificed 8 week postinfection and examined for several parasitologic and immunologic parameters. WT mice showed a significant change in granuloma size as a result of IL-13 blockade. Control Fc-treated IL-4 deficient mice also failed to show a reduced granulomatous response. The IL-4 deficient mice displayed a markedly reduced granulomatous response when compared with control Fc-treated mice. The double IL-4-deficient sIL-13R alpha 2-Fc-treated mice displayed a 40-50%

reduction in granuloma volume when compared with either control or sIL-13R.

alpha 2-Fc treated WT animals, and more than a 75% reduction when compared with control-Fc-treated IL-4-deficient mice. The sIL-13R alpha 2-Fc treatment a significantly reduced the collagen content of liver granulomas in WT mice and decreased liver hydroxyproline levels, while the IL-4-deficient mice showed a less significant reduction. The overall results showed that treatment with sIL-13R alpha 2-Fc significantly reduced hepatic fibrosis in S mansoni-infected mice.

MECHANISM OF ACTION: IL-13 or IL-4 inhibit or antagonise IL-13. The method is useful for treating or inhibiting the formation of tissue fibrosis resulting from infection with schistosoma or from healing of a surgical incision wound. Fibrosis affects skin epidermis, skin endodermis, muscle, tendon, cartilage, tissues of cardiac, pancreatic, lung, uterine, neural, testis, ovary, adrenal gland, artery, vein, colon, small intestine, biliary tract or gut tissue or more preferably liver tissue (claimed).

Dwg: 0.7

128 ANSWER 11 OF 16 WPIIDS (C) 2002 THOMSON DERWENT

ACCESSION NUMBER: 2001-024676 [03] - WPIIDS

DOC NO: CPI-C 2001-007458

DK FE ES FIGB GE
GH GM HR HU IL IS JP KE KG KP ER KZ LC T KR TS
LT LU LV MD MG
MK MN MW MX NO NZ PI PT RO RU SD SE SG SISK SI TD
TM IP LT LU AU G
U Z V N YU ZW
AU 2000057561 A 20010109 (200122)

EP 173484 A1 20020123 (200214) EN

R AL AT BE CEE CY DE DK ES FR GB GR IE IL IT LU NL

LV MC MK NL PT

RO SI SI

CN 1348465 A 20020508 (200253)

HU 200200862 A2 20020729 (200258)

KR 2002026426 A 20020410 (200267)

PATENT NO: KIND APPLICATION DATE

WO 2000064944 A1 WO 2000-US11612 20000428
AU 2000046805 A UPAB: 20000428
EP 1173484 A1 EP 2000-928591 20000428

CN 1348465 A CN 2000-806772 20000428
HU 200200862 A2 WO 2000-US11612 20000428
KR 2002026426 A KR 2001-713820 20011029

PATENT NO: KIND APPLICATION DATE

WO 2000064944 A1 WO 2000-US11612 20000428
AU 2000046805 A UPAB: 20000428
EP 1173484 A1 EP 2000-928591 20000428

CN 1348465 A CN 2000-806772 20000428
HU 200200862 A2 WO 2000-US11612 20000428
KR 2002026426 A KR 2001-713820 20011029

WO 2000036103 A1 20000622 (200037)* EN 60
 RW AT BE CH CY DE DK ES FR GB GE GM GR IE IT
 KE ES LU MC MW NL
 OA PL SD SE SI SZ TZ UG ZW
 W AI AM AT AU AZ BA BB BG BR BY CA CHE CN CT CZ DE
 DK EE ES FG GB GE
 GH GM HR HU ID IL IS JP KE KG KP KR KZ L C KI R LS
 LT LU LV MD MG
 MK MN MW MX NO NZ PI PT RO RU SD SE SG SE SK SI TJ
 TM TR TT UA UG
 UZ V N YU ZW
 AU 2000021775 A 20000703 (200046)
 EP 1141286 A1 20011010 (200167) EN
 P AI AT BE CH CY DE DK ES FR GB GR IE IT LU
 LV MC MK NL PI
 RO SE SI
 BR 99 6209 A 20011226 (200206)
 CN 1352686 A 20020605 (200201)

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2000036103 A1		WO 1999-US29493_19991213	
AU 2000021775 A		AU 2000-21775_19991213	
EP 1141286 A1		EP 1999-966166_19991213	
		WO 1999-US29493_19991213	
BR 9916209 A		BR 1999-16209_19991213	
CN 1352686 A		WO 1999-US29493_19991213	
		CN 1999-815591_19991213	

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AI 2000021775 A	Based on	WO 200036103
EP 1141286 A1	Based on	WO 200036103
BR 9916209 A	Based on	WO 200036103

PRIORITY APPLN. INFO: US 1998-211335 19981214

AN 2000-431587 [37] WPIDS

AB WO 200036103 A1 PAB. 20000807

NOVELTY - A polynucleotide comprising a nucleotide sequence that encodes an interleukin-13 binding chain (IL-13bc) or fragment, of IL-13 receptor is now.

DETAILED DESCRIPTION - The polynucleotide comprises a nucleotide sequence that is:

- (a) nucleotides 256 to 1404 of a 1525 murine nucleotide sequence, given in the specification;
- (b) nucleotides 33 to 1242 of a 1369 human nucleotide sequence, given in the specification;

(c) a variant of (a) or (b) as a result of degeneracy of the genetic code;

- (d) hybridizable under stringent conditions to (a) or (b);
- (e) a species homolog of (a) or (b);
- (f) an allelic variant of (a) or (b).

INDEPENDENT CLAIMS are also included for the following:

- (1) a host cell transformed with the new polypeptide;
- (2) producing an IL-13bc (binding chain) protein comprising

growing a culture of the host cell in culture medium and purifying IL-13bc from the culture;

(3) an isolated IL-13bc protein comprising a sequence of

(i) 383 amino acids, given in the specification;

(ii) amino acids 22 to 334 of (1);

(iii) amino acids 357 to 359 of (1);

(iv) 1380 amino acids, given in the specification;

(v) amino acids 26 to 341 of (IV);

(vi) amino acids 365 to 380 of (IV); or

(vii) fragments of (i) to (vi) having IL-13 receptor binding chain activity;

(4) a protein produced by (2);

(5) a composition comprising an antibody that reacts with (3), (5) identifying an inhibitor of IL-13 binding to the IL-13 receptor (IL-13R) comprising

(6) combining (2) with IL-13 or a fragment to form a first binding mixture;

(7) measuring binding between the protein and IL-13 or fragment;

(8) combining a compound with the protein and IL-13 or fragment to

form a second binding mixture;

(9) measuring the amount of binding; and

(10) comparing the binding in the first binding mixture with the

(12) inhibiting interaction of IL-13 with IL-13bc in a mammal by administering IL-13 antagonist.

ACTIVITY - Antiallerge, antinflammatory, antiasthmatic, dermatological, immunosuppressive, antithyroid, cytostatic

Male A/J mice were immunized intraperitoneally and challenged intratracheally with soluble ovalbumin. The allergic phenotype was assessed 4 days after the antigen challenge. Blockade of IL-13 was performed 24 hours before the allergen challenge by systemic administration of soluble IL-13-binding IgE fusion protein which binds to and

neutralizes IL-13. Challenge of allergen-immunized mice resulted in significant increases in airway responsiveness to acetylcholine Blockade

of IL-13 resulted in complete reversal of the established allergen-induced airway hyperresponsiveness, showing that asthma may be treated.

Mechanism of Action - IL-13 inhibitor

USE - For identifying and producing an IL-13bc protein that can inhibit the binding of IL-13 to an IL-13 receptor and treat an IL-13-related condition such as an IgE-mediated condition: Atopy, allergic conditions, asthma, immune complex diseases, lupus, nephritis, thyroiditis, Grave's disease or inflammatory conditions of the lung can be

treated. For potentiating IL-13 activity (all claimed). Cancer may be treated. Macrophage activation is enhanced allowing use in vaccination and treatment of mycobacterial, intracellular organisms, or parasitic infections. Dwg 0.4

128 ANSWER 12 OF 16 MEDLINE DUPLICATE: 4

ACCESSION NUMBER: 1999301279 MEDLINE

DOCUMENT NUMBER: 99301279 PubMed ID: 1037789

TITLE: Interleukin 13 is secreted by and stimulates the growth of Hodgkin Reed-Sternberg cells.

AUTHOR: Kapp U, Yeh W C, Patterson B, Elia A J, Kagi D, Ho A,

Hessel A, Lipsword M, Williams A, Mirtsos C, Itie A, Moyle M, Mak I W

CORPORATE SOURCE: Amgen Institute, Ontario Cancer Institute, the Department

of Medical Biophysics, and the Department of Immunology, University of Toronto, Toronto, Ontario M5G 2C1, Canada.

SOURCE: JOURNAL OF EXPERIMENTAL MEDICINE, (1999 Jun 21) 189(12): 1939-46.

Journal code: 2985109R ISSN: 0022-1007.

PUB. COUNTRY: United States

DOCUMENT TYPE: Journal Article (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 199907

ENTRY DATE: Entered STN: 19990806

Last Updated on STN: 19990806

Entered Medline: 1999-12-26

AB - Gene expression patterns can provide vital clues to the pathogenesis of neoplastic diseases. We investigated the expression of 950 genes in Hodgkin's disease (HD) by analyzing differential mRNA expression using microarrays. In two independent microarray experiments, the HD-derived

cell lines U288 and KM12 were compared with an Epstein-Barr virus (EBV) immortalized lymphoblastoid B cell line, LCL-GK. Interleukin (IL)-13

and IL-5 were found to be highly expressed in the HD-derived cell lines. Examination of IL-13 and IL-5 expression by Northern blot analysis and enzyme-linked immunosorbent assay confirmed these results and revealed the

expression of IL-13 in a third HD-derived cell line, HDLM2. Control LCL

and EBV-negative non-Hodgkin lymphoma-derived cell lines did not express

IL-13. In situ hybridization of lymph node tissue from HD patients showed

that elevated levels of IL-13 were specifically expressed by

Hodgkin Reed-Sternberg (HRS) tumor cells. Treatment of a

HD-derived cell line with a neutralizing antibody to IL-13 resulted in a dose-dependent inhibition of HRS cell proliferation. These data suggest that HRS cells produce IL-13 and that IL-13 plays an important role in the stimulation of HRS cell growth, possibly by an autocrine mechanism. Modulation of the IL-13 signaling pathway may be a logical objective for future therapeutic strategies.

128 ANSWER 13 OF 16 MEDLINE DUPLICATE: 5

ACCESSION NUMBER: 199933564 MEDLINE

DOCUMENT NUMBER: 99335604 PubMed ID: 10404009

ENTRY DATE: Entered STN: 19991012

Last Updated on STN: 19991012

Entered Medline: 19990928

AB - Rheumatoid arthritis (RA) is an autoimmune disease characterized by

a heavy lymphocytic infiltration into the synovial cavity, resulting in the secretion of a variety of cytokines which ultimately leads to destruction of joint tissue. Among the infiltrating cells are activated T cells which produce specific cytokines capable of osteoclast progenitor cell expansion, fusion, and activation. Cultures of activated human T cells and

human osteoblasts (hOBs) were used to study the possibility that IgM-phosphates may act on osteoblasts to produce the osteoclastogenic factor

interleukin-6 (IL-6). Purified T cells were activated with a combination of anti-CD3 and anti-CD28 antibodies, cocultured with hOBs in direct physical contact or separated by a transwell system, and conditioned media

(CM) were assayed for IL-6 production. After a 72 h incubation period, activated T cell-hOB interaction resulted in a 100-fold increase of IL-6 production over basal levels. The immunosuppressant cyclosporine A (CsA)

inhibited T cell tumor necrosis factor alpha and IL-6 production but did not inhibit the T cell induction of IL-6 from hOB. Assay of activated T-cell CM on hOB revealed that a soluble factor, not cell-contact, was the major inducer of IL-6. The induction of IL-6 mRNA by both activated T cell CM and CsA-treated activated T cell CM was confirmed by

Northern blot analysis. Neutralizing ***antibodies*** to ***IL-***

13 and IL-17 did not affect IL-6 production. These findings suggest that activated T cells produce a novel, potent, IL-6 inducing factor that may be responsible for the bone loss observed in RA patients.

128 ANSWER 14 OF 16 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1994433168 CAPLUS

DOCUMENT NUMBER: 121-33168

TITLE: Human interleukin-13 and the gene encoding it INVENTOR(S): Aversa, Gregorio; Banchereau, Jacques; Briere, Francine; Cooks, Benjamin G.; Coffman, Robert L.; Culpepper, Janice; Dang, Warren; De Vries, Jan; De Waal, Malefyt; René, et al.

PATENT ASSIGNEE(S): Schering Corp., USA

SOURCE: PCT Int. Appl., 136 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

WO 9404680 A1 1994-03-20 WO 1993-US7645 19930818

W: AU, BB, BG, BR, BY, CA, CZ, FI, HG, JP, KR, KZ, LK, MG, MN, MW,

NO, NZ, PL, RO, RU, SD, SK, UA, VN

PT, SE, BF, BJ, CF, CG, CL, CM, GA, GN, MI, MR, NE, SN, TD, TG

US 5596072 A 1997-01-21 US 1993-12543 19930201

EP 056947 A1 1995-06-14 EP 1993-920049 19930818

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, SI, PL, SE

JP 0758179 T2 1995-06-14 JP 1993-506436 19930818

PRIORITY APPLN. INFO.: US '99193416 19920821

US 1993-10977 19930129

US 1993-12543 19930201

WO 1993-US7645 19930818

AB - A cDNA encoding human interleukin 13 (IL-13) is cloned and expressed and

the immunological properties of the protein characterized. Polyclonal and monoclonal antibodies to the protein are prepared and methods of using the

cDNA and protein in diagnostics and therapeutics are disclosed. A cDNA

for the protein was cloned from a T cell cDNA library by repeated screening with a cDNA for mouse P660 protein to obtain overlapping clones

from which a full-length cDNA was constructed. The protein was

purified as a fusion protein with glutathione-S-transferase and purified from inclusion bodies by solubilization, refolding, and cleavage with thrombin

Human IL-13 stimulated B-cell DNA synthesis through the antigen receptor

and acted as a growth factor for B cells stimulated through the CD40 antigen. IL-13 also stimulated IgE secretion in anti-CD40 activated B

cells. The cDNA clone is deposited in the ATCC under Accession No. 2000036103.

The cDNA clone has been deposited in the EMBL under Accession No. 1999036103.

The cDNA clone has been deposited in the GenBank under Accession No. 1999036103.

The cDNA clone has been deposited in the DDBJ under Accession No. 1999036103.

The cDNA clone has been deposited in the NCBI under Accession No. 1999036103.

The cDNA clone has been deposited in the EBI under Accession No. 1999036103.

The cDNA clone has been deposited in the INSDC under Accession No. 1999036103.

The cDNA clone has been deposited in the BIR under Accession No. 1999036103.

The cDNA clone has been deposited in the PIR under Accession No. 1999036103.

The cDNA clone has been deposited in the PIR-2 under Accession No. 1999036103.

The cDNA clone has been deposited in the PIR-3 under Accession No. 1999036103.

The cDNA clone has been deposited in the PIR-4 under Accession No. 1999036103.

The cDNA clone has been deposited in the PIR-5 under Accession No. 1999036103.

The cDNA clone has been deposited in the PIR-6 under Accession No. 1999036103.

The cDNA clone has been deposited in the PIR-7 under Accession No. 1999036103.

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The cDNA clone has been deposited in the PIR-10 under Accession No. 1999036103.

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The cDNA clone has been deposited in the PIR-12 under Accession No. 1999036103.

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The cDNA clone has been deposited in the PIR-26 under Accession No. 1999036103.

The cDNA clone has been deposited in the PIR-27 under Accession No. 1999036103.

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The cDNA clone has been deposited in the PIR-33 under Accession No. 1999036103.

The cDNA clone has been deposited in the PIR-34 under Accession No. 1999036103.

The cDNA clone has been deposited in the PIR-35 under Accession No. 1999036103.

The cDNA clone has been deposited in the PIR-36 under Accession No. 1999036103.

The cDNA clone has been deposited in the PIR-37 under Accession No. 1999036103.

The cDNA clone has been deposited in the PIR-38 under Accession No. 1999036103.

The cDNA clone has been deposited in the PIR-39 under Accession No. 1999036103.

The cDNA clone has been deposited in the PIR-40 under Accession No. 1999036103.

The cDNA clone has been deposited in the PIR-41 under Accession No. 1999036103.

The cDNA clone has been deposited in the PIR-42 under Accession No. 1999036103.

The cDNA clone has been deposited in the PIR-43 under Accession No. 1999036103.

The cDNA clone has been deposited in the PIR-44 under Accession No. 1999036103.

The cDNA clone has been deposited in the PIR-45 under Accession No. 1999036103.

The cDNA clone has been deposited in the PIR-46 under Accession No. 19

Journal code: 1273291 ISSN: 0014-2980

PUB COUNTRY: GERMANY Germany, Federal Republic of

DOCUMENT TYPE: Journal Article (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 199407

ENTRY DATE: Entered SIN: 19990121

Last Updated on SIN: 19990129

Entered Medline: 19940708

AB Interleukin (IL)-13 is a newly described cytokine expressed by activated lymphocytes. We examined the effects of the murine recombinant cytokine on the phenotype and activation status of elicited peritoneal macrophages (M phi), concentrating on activities which are known to be modulated by interferon-gamma and IL-4. IL-13 markedly suppressed nitric oxide release and to a lesser extent secretion of the pro-inflammatory cytokine tumor necrosis factor-alpha. However, antimicrobial capacity was not completely jeopardized as the respiratory burst was unaffected, and indeed the enhanced expression of M phi mannose receptor and major histocompatibility

class II, and regulation of sialoadhesin, the M phi sialic acid-specific receptor involved in hemopoietic and lymphoid interactions, suggest that these cells are not simply deactivated, but primed for an active role in immune and inflammatory responses. These activities closely mimic those of IL-4, but mediation of the effects by IL-4 was discounted by the use of a neutralizing monoclonal ***antibody***. Thus, ***IL-4***.

IL-4, like IL-4, is a cytokine which has complex effects on M phi behavior, inducing activities characteristic of both activation and deactivation.

L28 ANSWER 16 OF 16 MEDLINE DUPLICATE: 7

ACCESSION NUMBER: 95137668 MEDLINE

DOCUMENT NUMBER: 95137668 PubMed ID: 7530690

TITLE: IL-13 has only a subset of IL-4-like activities on B chronic lymphocytic leukaemia cells

AUTHOR: Fluckiger A, Briere F, Zurawski G, Bridon JM, Banchereau J

CORPORATE SOURCE: Schering-Plough, Laboratory for Immunological Research, Dardilly, France

SOURCE: INIMI NOLOGY, (1994 Nov) 83 (3) 397-405.

Journal code: 0374672 ISSN: 0019-2805

PUB COUNTRY: ENGLAND United Kingdom

DOCUMENT TYPE: Journal Article (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 199503

ENTRY DATE: Entered SIN: 19950314

Last Updated on SIN: 19960129

Entered Medline: 19950302

AB The recently described interleukin-13 (IL-13) has been shown to share many of the effects of IL-4 on normal B cells, including growth-promoting activity and induction of CD23. In this study we compared the effects of

IL-13 and IL-4 on B chronic lymphocytic leukaemias (B-CLL) cells. After anti-CD40 activation, both IL-13 and IL-4 promoted the DNA synthesis of

B-CLL cells and increased the recovery of viable cells. The time kinetics of the proliferative response of B-CLL cells to IL-13 or IL-4 were superimposable and showed the long-lasting effect of both cytokines. As on normal B cells, both IL-4 and IL-13 synergized with IL-10 to enhance B-CLL

DNA synthesis. Moreover, IL-13, like IL-4, was able to increase CD23 expression on anti-CD40 activated leukemic B cells. The CD23 up regulation and the DNA synthesis induced by IL-13 or anti-CD40 activated B-CLL cells were significantly reduced when B-CLL

cells were cultured with anti IL-4 receptor monoclonal antibody, suggesting a common pathway for IL-13 and IL-4 signalling. However, after

cross-linking of surface IgM, IL-4 strongly inhibited the IL-2-induced DNA

synthesis of B-CLL cells, whereas IL-13 did not inhibit IL-2 driven proliferation of anti IgM activated B-CLL cells. Furthermore, while IL-4

strongly up-regulated the expression of CD23 on anti IgM activated leukaemic B cells, IL-13 only marginally increased it. Finally, IL-13, in

FILE MEDLINE, JAPIO, BIOSIS, SCISEARCH, WPIDS, CAPLUS, EMBASE, LITERED

AT 2018 2005 19 Oct 2002

11 10870SII_13 OR IL_13 OR INTERLEUKIN_13 OR

INTERLEUKIN_14

12 228111 AND ANTIOD*

13 0\$10_1 \$10 ANTIOD*

14 0\$10_2 \$10 ANTIOD*

15 0\$10_3 \$10 ANTIOD*

16 0\$10_4 \$10 ANTIOD*

17 0\$10_5 \$10 ANTIOD*

18 0\$10_6 \$10 ANTIOD*

19 0\$10_7 \$10 ANTIOD*

20 0\$10_8 \$10 ANTIOD*

21 0\$10_9 \$10 ANTIOD*

22 0\$10_10 \$10 ANTIOD*

23 0\$10_11 \$10 ANTIOD*

24 0\$10_12 \$10 ANTIOD*

25 0\$10_13 \$10 ANTIOD*

26 0\$10_14 \$10 ANTIOD*

27 0\$10_15 \$10 ANTIOD*

28 0\$10_16 \$10 ANTIOD*

29 0\$10_17 \$10 ANTIOD*

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31 0\$10_19 \$10 ANTIOD*

32 0\$10_20 \$10 ANTIOD*

33 0\$10_21 \$10 ANTIOD*

34 0\$10_22 \$10 ANTIOD*

35 0\$10_23 \$10 ANTIOD*

36 0\$10_24 \$10 ANTIOD*

37 0\$10_25 \$10 ANTIOD*

38 0\$10_26 \$10 ANTIOD*

39 0\$10_27 \$10 ANTIOD*

40 0\$10_28 \$10 ANTIOD*

41 0\$10_29 \$10 ANTIOD*

42 0\$10_30 \$10 ANTIOD*

43 0\$10_31 \$10 ANTIOD*

44 0\$10_32 \$10 ANTIOD*

45 0\$10_33 \$10 ANTIOD*

46 0\$10_34 \$10 ANTIOD*

47 0\$10_35 \$10 ANTIOD*

48 0\$10_36 \$10 ANTIOD*

49 0\$10_37 \$10 ANTIOD*

50 0\$10_38 \$10 ANTIOD*

51 0\$10_39 \$10 ANTIOD*

52 0\$10_40 \$10 ANTIOD*

53 0\$10_41 \$10 ANTIOD*

54 0\$10_42 \$10 ANTIOD*

55 0\$10_43 \$10 ANTIOD*

56 0\$10_44 \$10 ANTIOD*

57 0\$10_45 \$10 ANTIOD*

58 0\$10_46 \$10 ANTIOD*

59 0\$10_47 \$10 ANTIOD*

60 0\$10_48 \$10 ANTIOD*

61 0\$10_49 \$10 ANTIOD*

62 0\$10_50 \$10 ANTIOD*

63 0\$10_51 \$10 ANTIOD*

64 0\$10_52 \$10 ANTIOD*

65 0\$10_53 \$10 ANTIOD*

66 0\$10_54 \$10 ANTIOD*

67 0\$10_55 \$10 ANTIOD*

68 0\$10_56 \$10 ANTIOD*

69 0\$10_57 \$10 ANTIOD*

70 0\$10_58 \$10 ANTIOD*

71 0\$10_59 \$10 ANTIOD*

72 0\$10_60 \$10 ANTIOD*

73 0\$10_61 \$10 ANTIOD*

74 0\$10_62 \$10 ANTIOD*

75 0\$10_63 \$10 ANTIOD*

76 0\$10_64 \$10 ANTIOD*

77 0\$10_65 \$10 ANTIOD*

78 0\$10_66 \$10 ANTIOD*

79 0\$10_67 \$10 ANTIOD*

80 0\$10_68 \$10 ANTIOD*

81 0\$10_69 \$10 ANTIOD*

82 0\$10_70 \$10 ANTIOD*

83 0\$10_71 \$10 ANTIOD*

84 0\$10_72 \$10 ANTIOD*

85 0\$10_73 \$10 ANTIOD*

86 0\$10_74 \$10 ANTIOD*

87 0\$10_75 \$10 ANTIOD*

88 0\$10_76 \$10 ANTIOD*

89 0\$10_77 \$10 ANTIOD*

90 0\$10_78 \$10 ANTIOD*

91 0\$10_79 \$10 ANTIOD*

92 0\$10_80 \$10 ANTIOD*

93 0\$10_81 \$10 ANTIOD*

94 0\$10_82 \$10 ANTIOD*

95 0\$10_83 \$10 ANTIOD*

96 0\$10_84 \$10 ANTIOD*

97 0\$10_85 \$10 ANTIOD*

98 0\$10_86 \$10 ANTIOD*

99 0\$10_87 \$10 ANTIOD*

100 0\$10_88 \$10 ANTIOD*

FAMILY ACC NUM COUNT: 1
PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

WO 2001062933 A2 20010830 WO 2001062933 20010220

W, AE, AG, AI, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ,

CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH,

GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS,

LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL,

PT, RO, RU, SE, SG, SI, SK, TI, TM, TR, TT, UG, UA, EG, US, TZ,

VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TI, TM,

FW, GH, GM, KE, LS, MW, MZ, SD, SI, SZ, TZ, UG, ZW, AT,

BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,

BE, BJ, CF, CG, CL, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN INFO: GB 2000-4016 A 20000222

AB This invention relates to variants of the nucleic acid sequence

encoding

Interleukin 13 (IL-13) and the use of such sequence variants in

medicine,

esp. in the diagnosis of susceptibility or resistance to disorders assod.

with an immune response, particularly the inflammatory response

assod.

with asthma, atopic allergy and latex sensitivity. Unexpectedly, by

comparing the IL-13 gene sequences deposited in the GenBank TM

database,

upstream of nucleotide +80, we identified four single nucleotide

variations in four of the deposited sequences of the IL-13 gene. The four

potential single nucleotide polymorphisms (SNPs) were a G/C at +

543nt,

a C/T at +1922nt, a G/A at +2043nt and a C/G at +2579nt; upstream of

the first nucleotide of the start codon (figure 1) [SEQ ID No 1], which

represent nucleotide positions 1314, 2693, 2814 and 3350 resp. in

GenBank TM deposited sequence L13029. Moreover, the G to A

substitution at

position +2043nt was found to change the codon sequenc CGC that

codes for

the basic amino acid arginine (Arg) at amino acid position 130 of the

unprocessed precursor (see GenBank TM deposited sequence P35225),

to CAG

that codes for the hydrophilic amino acid glutamine (Gln) (see figure 2;

[SEQ ID No 2]). The invention also provides a transgenic non-human

mammalian animal whose germ cells and somatic cells contain a nucleic

acid. The invention further provides the use of an amino acid sequence

in

a method of producing an antibody, for use in detecting :susceptibility or

resistance to a disorder assod. with an immune response.

127 ANSWER 3 OF 12 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 2000535020 CAPLUS

DOCUMENT NUMBER: 133149151

TITLE Materials and methods to inhibit Hodgkin and Reed

Sternberg cell growth

INVENTOR(S): Mak Tak W, Kapp Ursula

PATENT ASSIGNEE(S): Amgen Canada, Can

SOURCE: PCT Int Appl, 28 pp.

CODEN PIJXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC NUM COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

WO 2000044407 A2 20000603 WO 2000044407 20000200

W, AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH,

CG, CL, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH,

GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS,

LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL,

PT, RO, RU, SE, SG, SI, SK, TI, TM, TR, TT, UG, UA, EG, US, TZ,

VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TI, TM,

FW, GH, GM, KE, LS, MW, MZ, SD, SI, SZ, TZ, UG, ZW, AT,

BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE,

BE, BJ, CF, CG, CL, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN INFO: PCT Int Appl, 28 pp.

AB The present invention provides a method and compns. for specifically

delivering an effector mol. to a tumor cell. The method involves

providing a chimeric mol. comprising an effector mol. (such as

Pseudomonas exotoxin B diphtheria toxin, ricin, abrin, or cytotoxic drugs) attached to a targeting mol. (such as interleukin-13 or anti-interleukin-13 antibody) that specifically binds an interleukin-13 receptor and contacting a tumor cell with the chimeric mol. in the presence of an interleukin-4 receptor blocker (matured interleukin-4).

REFERENCE COPIES: 1 THERE ARE 1 CITED

REFERENCES AT THE END OF THIS DOCUMENT

INVENTOR(S): Partida, Paracots

PATENT ASSIGNEE(S): Royal Brompton and Harefield NHS Trust, UK

DATE: 2002-07-12

DOCUMENT TYPE: Journal Article (JOURNAL ARTICLE)

LANGUAGE: English

FAMILY ACC NUM COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

WO 2001062933 A2 20010830 WO 2001062933 20010220

W, AE, AG, AI, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ,

CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH,

GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS,

LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL,

PT, RO, RU, SE, SG, SI, SK, TI, TM, TR, TT, UG, UA, EG, US, TZ,

VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TI, TM,

TITLE Method for diagnosing, imaging, and treating tumors bearing interleukin 13-specific receptors
INVENTOR(S) Debinski, Waldemar; Connor, James R.
PATENT ASSIGNEE(S) The Penn State Research Foundation, USA
SOURCE PCT Int. Appl., 27 pp
CODEN PINXDD2
DOCUMENT TYPE Patent
LANGUAGE English
FAMILY ACC. NUM. COUNT 5
PATENT INFORMATION

PATENT NO	KIND DATE	APPLICATION NO	DATE
WO 2000040264	A1 20000713	WO 2000 US149	20000810
W, AL, AU, AM, AU, AU, A7, BA, BB, BG, BR, BY, CA, CH, CN, CR, CL	C7, DE, DK, DM, FR, ES, FI, GB, GD, GF, GH, GM, HR, HU, ID, II	IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LS, LT, LU, LV, MA,	MD, MG, MK, MS, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI,
ZW, AM,	SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA,	AZ, BY, KG, KZ, MD, RU, TJ, TM	RW, GH, GM, KE, LS, MW, SD, SI, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE,
CE,	DK, ES, FI, FR, GB, GR, IL, IT, LU, MU, NL, PT, SE, BE, BJ,	CG, CL, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG	
US 2001053371	AI 20011220	US 1999-226794	19990107
EP 1149167	AI 20011010	EP 2000-901390	20000105
F, AI, BE, CH, DE, DK, ES, FR, GB, GR, IL, IT, LU, NL, SE, MC, PL,	II, IS, LT, LV, EL, RO		

JP 200253495 32 20020105 JP 2006-59109 20000105
PRIORITY APPLN INFO : US 1999-226794 A 19990107
WO 2000-US149 W 20000105

AB. This invention is a method of inhibiting the growth of tumor bearing II-13-specific receptors. Included among this class of tumors is glioblastoma multiforme (GBM), a rapidly progressing brain tumor for which there is currently no effective treatment available. In the disclosed method, a chimeric cytotoxin comprising an II-13 receptor-binding moiety and a cytotoxic moiety is delivered into a mammalian subject having a tumor bearing II-13-specific receptors. All studied human GBM specimens showed uptake into the II-13-positive tumor.

abundantly express the IL-1 β -specific tumor.
REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES
AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE
REFERENCES SECTION.

J.27. ANNUAL REPORTS OF THE CAPTAINS OF BIRDSHIP, 2002-2003

121 ANSWER TO 12 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1998:180729 CAPLUS

DOCUMENT NUMBER: 128-256388
TITLE: Therapeutic molecules
INVENTOR(S): Nicola, Nicos Antony; Hilton, Douglas J.
Zhang,
Jian-Guo Simpson, Richard John
PATENT ASSIGNEE(S): Amrad Operations Pty. Ltd., Australia
Nicola, Nicos

Antony Hilton, Douglas James; Zhang, Jian-Guo;
Sin-pao, Richard John
SOURCE Full Text Available, 79 pp.
CODEN PIXX2D
DOCUMENT TYPE Patent
LANGUAGE English
PUBLISHER U.S. Patent and Trademark Office

II-13BP
mutant gene

127 ANSWER 6 OF 12 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER 1998288048 CAPLUS
DOCUMENT NUMBER 129 26848
TITLE Regulation of interleukin-13 receptor constituents on
mature human B lymphocytes
AUTHORS Ogata, Haruki; Ford, Dwayne; Kouittab, Nicola;
King,

Thomas C., Vita, Natalio, Minty, Adrian, Stoeckler, Johanna, Morgan, Deborah, Grisolia, Christopher, Morgan, John W., Marzel, Abby I.

CORPORATE SOURCE: Roger Williams Med. Cent., Brown Univ
Providence

PI: 02908, USA

SOURCE: Journal of Biological Chemistry (1998), 273(16),
9864-9871

CODEN: JBCHA3; ISSN: 0021-9258

PUBLISHER: American Society for Biochemistry and Molecular
Biology

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Human B cells stimulated through both their Ig and CD40 receptors up-regulate 745 interleukin (IL)-13 ligand binding sites with an affinity of 0.91 nM within 24 h. IL-13 binds primarily to the IL-13R. α 1 with subsequent sequestration of the IL-4R. α 1 into the complex. IL-13R. α 1 may also be found in those receptors capable of binding IL-4. γ Chain (γ mac) participates in receptors capable of binding IL-4 but is not found in association with bound IL-13. Dimeric receptors composed of the IL-4R. α 1 complexed with either the IL-13R. α 1 or γ mac occur simultaneously within defined B cell populations. mRNAs for all receptor constituents are increased subsequent to IL-13 stimulation alone, while maximal expression of IL-13R. α 1 is more dependent upon co-stimulation of Ig and CD40 receptors. mRNA levels for IL-13R. α 1 vary over a wider range subsequent to surface stimulation than other receptor components. Although γ mac is not bound to IL-13 in B cells under the conditions evaluated, it may influence IL-13 binding by competing with IL-13R. α 1 for association. In the absence of the IL-4R. α 1 chain, IL-13R. α 1 does not participate in the IL-13 receptor that is up-regulated upon activation of quiescent tonsillar B lymphocytes, although mRNA for the protein may be found in the centroblastic fraction of tonsillar cells.

L27 ANSWER 1 OF 12 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 997-594756 CAPLUS
DOCUMENT NUMBER: 127.258660
TITLE: Cloning and expression of cDNA for interleukin-1
binding chain of IL-13 receptor, identification of
inhibitors of binding, and treatment of Ig-mediated
diseases

INVENTOR(S): Collins, Mary; Donaldson, Debra; Fitz, Lor
Neben
PATENT ASSIGNEE(S): Genetics Institute Inc., USA
SOURCE: PCT Int. Appl., 49 pp
CODEN: PIXNDZ
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC NUM: COUNT: 1

PATENT NO.	KIND DATE	APPLICATION NO. DATE
WO 9731994	A1 - 19970904	WO 1997-183124 - 1997-02-27
W. A., CA, JP, MX		
FW, NL, BE, CH, DE, ES, FR, GB, GR, IE, IT, LU, MC		
NP, PL, SI		
US 5716062	A - 1998-01-20	US 1996-061972 - 1996-09-11
AL 97-10804	A1 - 1997-9-16	AL 1997-1-061 - 1997-22-08
US 6214539	BI - 200104-04	US 1997-841751 - 1997-04-30
US 5248734	BI - 200106-09	US 1997-846340 - 1997-04-30
US 6268400	BI - 200107-01	US 1997-846344 - 1997-04-30
PRIORITY APPLN. INEQ.		US 1996-061972 - A - 1996-03-03

WO 1997/0228
AB 2 Polynucleotides encoding the IL-13-binding subunit of the IL-13 receptor
and fragments thereof are disclosed. IL-13 receptor proteins, methods
for their production, inhibitors of binding of IL-13 and its receptor and methods
for their identification are also disclosed. Use of the inhibitor for
treatment of Ig-mediated diseases such as allergies, asthma, lupus, etc.

Laurent,
Patrck, Vita, Natalia
SOURCE PCT Int. Appl., 82 pp
CODEN PIXXD2
DOCUMENT TYPE Patent
LANGUAGE French
FAMILY ACC. NUM. COUNT 1
PATENT INFORMATION

PATENT NO. KIND DATE APPLICATION NO. DATE
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WO 9729926 A1 19970612 WO 1996 FRT156 19961107
W, AL, AM, AT, AU, AZ, BA, BB, BG, BE, BY, CA, CH, CN,
CU, CZ, DE,
DK, FI, IS, H, GB, GR, HU, IL, IS, JP, KE, KG, KP, KR, KZ,
L, C,
LK, LR, LS, LT, LV, MD, MG, MK, MN, MW, MX, NO,
NZ, PL, PT,
RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US,
UZ, VN,
AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW, KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR,
GB, GR,
IE, IT, LU, MC, NL, PT, SE, BE, BJ, CF, CG, CI, CM, GA, GN,
ML.

MR, NE, SN, TD, TG
 FR 2742156 AI 19970613 FR 1995-14424 19951206
 CA 2238893 AA 19970612 CA 1996-2238893 19961107
 AU 9675760 AI 19970627 AU 1996-75760 19961107
 EP 876482 AI 19981111 EP 1996-938273 19961107
 F AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE,
 MC, PT

IE FT
 BR 961-697 A 19990217 BR 1996-1697 19961107
 JP 11511028 T2 19990928 JP 1996-521017 19961107
 ZA 961-10238 A 19980605 ZA 1996-10238 19961205
 NO 98-2550 A 19980815 NO 1998-2550 19980604
PRIORITY APPN. INFO. FR 1995-14424 A 19951206
 WO 1996-FR1756 W 19961107
AB: Human interleukin 13 (IL-13) receptors are identified and cDNAs encoding them are cloned for diagnostic and therapeutic use. Two subunits of the receptor are described: one (IL-13 alpha) is specific for IL-13 and the other (IL-13 beta) is involved in the binding of IL-13 to the interleukin 4 receptor. The receptors can be used to increase the effectiveness of IL-13 by increasing the level of the receptor, or inhibiting IL-13 e.g. with antibodies to the receptor or a sol. form of the receptor. The cDNA is:

can be used to detect mutant alleles of the genes for the subunits in the diagnosis of immune disorders (no data). Mouse cDNAs for the receptors were used to design primers and probes for the cloning of the human receptors. A sol. form of one of the subunits was capable of antagonizing the soluble receptor.

It is likely that the receptor was involved in the activation of the transcription factor STAT6.

L27 ANSWER 9 OF 12 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1997:425227 CAPLUS
DOCUMENT NUMBER: 127:30144
TITLE Interceptor-13 receptor-alpha-chain protein NR4.
process and by mouse cDNA sequencing, and expression in

mouse and human cDNA sequences, and applications in assays for asthma and allergy therapeutics and diagnostics

Metcalf, Donald; Zhang, Jian Guo
PATENT ASSIGNEE(S): Amrad Operations Pty. Ltd., Australia,
Wilson, Tracy,
Nicola, Nicos A.; Hilton, Douglas J.; Metcalf, Donald,
Zhang, Jian Guo
SOLICITORS PCT Int. Appl. 92 pp
COURT FILED 12/22/92
DOCUMENT TYPE Patent
INVENTOR English
FAMILY SIZE 11 NUMBER 1,2

PATENT INFORMATION
PATEN. NO. KIND DATE APPLICATION NO. DATE
WO 9715663 A1 19970501 WO 1996-AU668 19961223
W, A1, AM, AI, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN,
CZ, DE, DK, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ,
LK, LT, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO,
NZ, PL, PT
RO, RU, SD, SE, SG, SI, SK, TT, TM, TR, TT, UA, UG, US

AU 19962208 A 19960909
WO 1996-AU 668 W 19961023
US 1998 51843 A1 19980629

AB - The present invention relates generally to a novel hematopoietin receptor.

NR4, which is the interleukin-13 receptor alpha-chain, or components or parts thereof and to genetic sequences encoding the same. The receptor mol., and their components and or parts and the genetic sequences encoding

same of the present invention are useful in the development of a wide range of agonists, antagonists, therapeutics and diagnostic reagents based

on ligand interaction with its receptor. Mouse and human NR4 cDNA sequences are included.

127 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER 1996708428 CAPLUS

DOCUMENT NUMBER 12531737

TITLE Interleukin-13 receptor-specific chimeric proteins and their uses to treat tumors

INVENTOR(S) Puri, Raj K.; Debinski, Waldemar; Pastan, Ira; Obin, Nicholas

PATENT ASSIGNEE(S) The Government of the United States of America, USA

SOURCE PCT Int. Appl., 76 pp.

CODEN PIXXD2

DOCUMENT TYPE Patent

LANGUAGE English

FAMILY ACC. NUM. COUNT 5

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

WO 9629417 A1 19960926 WO 1996-US3486 19960715

W: AU, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EL,

ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS,

LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO,

RU, SD, SI,

SG, SI

RW, EE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR,

GB, GP,

IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CL, CM, GA, GN

US 614191 A 19970325 US 1995-404685 19950315

CA 2215122 AA 19960926 CA 1996-2215122 19960315

AU 6653110 A1 19961008 AU 1996-53110 19960315

AU 714541 B2 20000106 EP 1996-909693 19960315

R: AT, BE, CH, DU, DK, ES, FR, GB, GR, IT, LU, NL, SE,

MC, PT,

IE, FI

JP 2000511042 T2 20000829 JP 1996-528499 19960315

US 5191456 A 19990706 US 1997-821840 19970321

PRIORITY APPN. INFO: US 1995-404685 A 19950315

WO 1996-US3486 W 19960315

AB A method and compns. are provided for specifically delivering an effector

mol. to a tumor cell. The method involves providing a chimeric mol. that

comprises an effector mol. attached to a targeting mol. that specifically binds an interleukin-13 (IL-13) receptor and contacting a tumor cell with

the chimeric mol. The target moiety of the the chimeric mol. may consist

of IL-13, an anti-IL-13 receptor antibody, or circularly permuted IL-13,

the effector moiety may be a cytotoxin (Pseudomonas exotoxin,

Diphtheria toxin, ricin, or abrin); label, radionuclide, drug, liposome, ligand, or antibody. Thus, recombinant DNA technol. was used to produce single-chain

fusion protein(s) human IL-13 (or its circularly permuted analog) to

other

of 2 mutant forms of Pseudomonas aeruginosa exotoxin A. Circularly

permuted IL-13 is a deriv. in which the normal N- and C-terminal are linked

via the Gly-Gly-Ser-Gly linker peptide, and the bond between Gly-43 and

Met-44 is broken, thereby yielding spfIL-13 in which Met-44 is the new

N-terminus and Gly-43 is the new C-terminus. PE38QQR is a

truncated form

of Pseudomonas exotoxin composed of amino acids 253-364 and

381-608, the

lysine residues at positions 569 and 606 are replaced by Gln and at 613

is

replaced by Arg. P34E is a full-length Pseudomonas exotoxin with a

127 ANSWER 11 OF 12 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER 1996 352585 CAPLUS
DOCUMENT NUMBER 12531750
TITLE IL-13 released by and localized in human basophils
AUTHORS Li, Huamin; Sim, Tommy C.; Alam, Reuel
CORPORATE SOURCE Department Internal Medicine, University Texas Medical

Branch, Galveston, TX, 77555, USA

SOURCE Journal of Immunology (1996), 156(12), 4833-4838
CODEN JIMIA3, ISSN: 0022-1767

PUBLISHER American Association of Immunologists

DOCUMENT TYPE Journal

LANGUAGE English

AB We and others have shown that human basophils can synthesize and release

IL-4. However, IL-13, a cytokine that closely resembles IL-4, has not hitherto been described as a basophil product. The prodn. of IL-13 by basophils was demonstrated by immunocytochem. Approx. 70% of basophils stimulated with anti-Fc epsilon RI alpha (antibody to the alpha subunit of IgE receptor type I) stained for IL-13. Under similar exptl. conditions, mononuclear cells failed to stain for IL-13. The cytokine was

localized to basophilic granules by electron microscopic examn. of immunogold staining. The secretion of IL-13 into the culture supernatant

was assayed by ELISA. Kinetic studies showed detectable IL-13 release at

3 h, which steadily increased up to 24 h. This is significantly different from the kinetics of basophil histamine and IL-4 release. IL-13 prodn. was also obsd. upon stimulation with anti-IgE, anti-Fc epsilon RI alpha, IL-3, and A23187 in a dose-dependent manner. PBMC neutrophils, and cosmophils isolated from the same donors did not release IL-13 after anti-IgE stimulation. The anti-IgE-induced basophil IL-13 synthesis could

be enhanced by IL-3 preincubation (with and without IL-3 preincubation).

anti-IgE induced IL-13 prodn. was 227 and 42 pg/106 basophils, resp. PBMC produced a significant amt. of IL-13 upon stimulation with PHA, but a

low level of IL-13 in response to A23187 and/or PMA. Eosinophils and

neutrophils did not produce IL-13 when cultured with A23187, IL-5, and

anti-Fc epsilon RI alpha. This is the first demonstration of IL-13 prodn. by basophils. Our data suggest that basophils, in addn. to secreting mediators, can represent an important source of proallergen cytokines

127 ANSWER 12 OF 12 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER 19730117 CAPLUS

DOCUMENT NUMBER 126103048

TITLE Interleukin-13, in combination with anti-interleukin-12, increases graft prolongation after portal venous immunization with cultured allogeneic bone marrow-derived dendritic cells

AUTHOR(S) Gorczyński, Reginald M.; Cohen, Zane; Fu, Xin; Meng;

Hua, Zeng; Sun, Yongliang; Chen, Zhiqi

CORPORATE SOURCE Department Surgery and Immunology, University

Toronto, Toronto, M5G 2C4, Can.

SOURCE Transplantation (1996), 62(11), 1592-1600

CODEN TRPLAU, ISSN: 0041-1377

PUBLISHER Williams & Wilkins

DOCUMENT TYPE Journal

LANGUAGE English

AB Portal venous (pv) transfusion before transplant with large nos.

(100 fm2, 106) of irradiated multiple minor histocompatble spleen cells (B14 Br) augments allogeneic skin graft survival in C. Blaize. We show in earlier studies that this is correlated with preferential activation for prodn. of type 2 cytokines (interleukin [IL]-4 and IL-10) and de-reduced prodn. of type 1 cytokines (IL-2 and interferon [IFN]-gamma). We have also shown that recombinant rIL-12, in asso.

with anti-IL-10 monoclonal antibody, can reverse *in vivo* the graft prolongation afforded by pv immunization and the altered cytokine prodn.

that follows. Adoptive transfer of inhibition of graft rejection is possible at early times after pv immunization, using plastic adherent cells obtained from the liver of treated mice. We show that within 4 days of pv immunization, dendritic cells (CD11c+CD14-) isolated from the thymus,

mesenteric lymph node (MLN), and spleen of mice receiving

MHC incompatible

cell grafts (C3H with C57BL/6) can transfer skin graft prolongation to

transplant

and manipulation of cytokine levels *in vivo* may prove an effective regimen

in the induction of unresponsiveness in transplant recipients

d126 ibid abs 1-16

126 ANSWER 1 OF 16 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER 2002 696137 CAPLUS

DOCUMENT NUMBER 137231354

TITLE Method for constructing expression cassette of a chimeric interleukin 13 (IL-13) vaccine and therapeutic uses

INVENTOR(S) Ashman, Claire; Crowe, James Scott; Ellis, Jonathan

Henry, Lewis; Alan Peter

PATENT ASSIGNEE(S) Glaxo Group Limited, UK

SOURCE PCT Int. Appl., 83 pp.

CODEN PIXXD2

DOCUMENT TYPE Patent

LANGUAGE English

FAMILY ACC. NUM. COUNT 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

WO 2002070711 A1 20020912 WO 2002-BG900 20020301

W: AF, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ,

CA, CH, CN,

CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD,

GE, GH,

GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK,

LR,

LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO,

NC, OM, PH,

PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TZ, TN, TR, TT,

TZ,

UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG,

EZ, MD, RU,

TG, TM

RW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, EG, ZM, ZW,

AT, BE, CH,

CY, DE, DK, ES, FI, FR, GB, GR, IE, LU, NL, MC, NI, PT, SE,

TE,

BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN,

TG, TG

PRIORITY APPLN. INFO: GB 2001-5360 A 20010303

AB The present invention provides a method for constructing expression cassette of a chimeric interleukin 13 (IL-13) vaccine in which the sequence of the predicted antigenic loops has been taken from murine IL-13, and the sequence of the predicted structural (predominantly helical) regions has been taken from human IL-13. The present invention

relates to an isolated polypeptide useful for immunization against self-antigens. In particular the invention relates to a self-protein that is capable of raising auto-antibodies when administered *in vivo*. The invention particularly relates to rendering human cytokines immunogenic in humans. The invention further relates to pharmaceutical compns. comprising such compds. and their use in medicine and to methods for their prodn.

REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE REFORMAT

RECORD. ALL CITATIONS AVAILABLE IN THE REFORMAT

126 ANSWER 2 OF 16 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.

ACCESSION NUMBER 2002 343976 BIOSIS

DOCUMENT NUMBER PRV20020343936

TITLE A monoclonal antibody to mouse IL-13 inhibits acute asthma response

AUTHOR(S) Yang, Gaoyun (1); Finnell, Eva (1); Shieh, Dave (1); Griswold, Don (1); Li, Li (1)

CORPORATE SOURCE (1) Centocor, Inc., 200 Great Valley Parkway, Malvern, PA, 19355 USA

SOURCE FASEB Journal, (March 20, 2002) Vol. 16, No. 4, pp. A672.

http://www.fasebj.org/print

Meeting Info.: Annual Meeting of the Professional Research Scientists on Experimental Biology, New Orleans, Louisiana, USA April 20-24, 2002

ISSN: 0892-6638

DOCUMENT TYPE Conference

AB Met 44 is broken, thereby yielding spfIL-13 in which Met-44 is the new N-terminus and Gly-43 is the new C-terminus. PE38QQR is a

truncated form

of Pseudomonas exotoxin composed of amino acids 253-364 and

381-608, the

lysine residues at positions 569 and 606 are replaced by Gln and at 613

is

replaced by Arg. P34E is a full-length Pseudomonas exotoxin with a

new mutation in the N-terminus, in which the bond between Gly-43 and

Met-44 is broken, thereby yielding spfIL-13 in which Met-44 is the new

N-terminus and Gly-43 is the new C-terminus. PE38QQR is a

truncated form

of Pseudomonas exotoxin composed of amino acids 253-364 and

381-608, the

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lysine residues at positions 569 and 606 are replaced by Gln and at 613

is

replaced by Arg. P34E is a full-length Pseudomonas exotoxin with a

new mutation in the N-terminus, in which the bond between Gly-43 and

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of Pseudomonas exotoxin composed of amino acids 253-364 and

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lysine residues at positions 569 and 606 are replaced by Gln and at 613

is

replaced by Arg. P34E is a full-length Pseudomonas exotoxin with a

new mutation in the N-terminus, in which the bond between Gly-43 and

Met-44 is broken, thereby yielding spfIL-13 in which Met-44 is the new

N-terminus and Gly-43 is the new C-terminus. PE38QQR is a

truncated form

of Pseudomonas exotoxin composed of amino acids 253-364 and

381-608, the

lysine residues at positions 569 and 606 are replaced by Gln and at 613

is

replaced by Arg. P34E is a full-length Pseudomonas exotoxin with a

new mutation in the N-terminus, in which the bond between Gly-43 and

to 100% of HRS cells; in 86% of 36 cases of classical HL tested by *in situ*

hybridisation. Furthermore we were able to demonstrate that:

of the IL-13 secreting cell lines HDLM2 and L1236 can be inhibited by treatment with IL-13 neutralizing antibodies. These findings suggest that

an autoimmunity stimulation by IL-13 might be one step in the multistep transformation process of HL. Another pathway that might play a role for

proliferation and survival of HRS cells is activation of NF-kappaB. As opposed to normal B cells constitutive presence of NF-kappaB1 relA could

be demonstrated in the nucleus of HRS-cells. Here we investigate whether

IL-13 signalling and activation of NF-kappaB might be linked to each other.

In HL, HL-derived cell lines HDLM2 and L1236 were cultured untreated or in

the presence of different compounds inhibiting IL-13 signalling: IL-13 neutralizing ***antibodies*** (alpha- ***IL-13*** + ***IL-4***), specific antibodies blocking the IL-13/IL-4 receptor (alpha-IL-13/IL4R) and

an IL-4 mutant molecule (IL4RY). After 48h of treatment cells were harvested and investigated for nuclear NF-kappaB1 relA by gel-shift and

super-shift experiments. At the same time, treated cells were also tested for cell proliferation by measurement of 3H-thymidine uptake. In both cell lines treatment with alpha-IL-13, alpha-IL-13/IL4R and IL4RY inhibited

proliferation. In HDLM2 cells neutralization of IL-13, as well as blockade

of the IL-13 IL-4R leads to a significant loss of nuclear NF-kappaB1 relA.

In L1236 NF-kappaB activation was not altered by IL-13 neutralization. This study indicates that NF-kappaB1 relA activation may be linked to IL-13 signalling mediated by the IL-13/IL-4R in HL-derived cells.

Proliferation of the cell line L1236 can be inhibited by IL-13 neutralization without inactivation of NF-kappaB1 relA, which suggests

that the proliferative effect of IL-13 on HL-cells might not depend on NF-kappaB activation.

1.26 ANSWER 8 OF 16 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.

ACCESSION NUMBER: 2002:129980-BIOSIS

DOCUMENT NUMBER: PREV20020129980

TITLE: Interleukin 13 (IL-13) lev's in serum from patients with Hodgkin disease (HD) and healthy volunteers.

AUTHOR(S): Fiumara, Paolo (1); Caballadas, Fernando (1); Younes, Anas (1)

CORPORATE SOURCE: (1) Lymphoma Malignoma, M.D. Anderson Cancer Center, Houston, TX USA

SOURCE: Blood, November 16, 2001; Vol. 98, No. 11 Part 1, pp

129a, http://www.bloodjournal.org , print.

Meeting Info: 43rd Annual Meeting of the American Society of Hematology, Part I Orlando, Florida, USA December 07-11,

2001

ISSN: 0006-4971.

DOCUMENT TYPE: Conference

LANGUAGE: English

AB: Interleukin 13 (IL-13) has recently been found to be highly expressed in

cultured Hodgkin disease (HD)-derived cell lines and primary Hodgkin and

Ried-McCormick (HRS) cells. Furthermore, IL-13 has been detected in the supernatants of HD derived cell lines by enzyme-linked immunosorbent assay

(ELISA), and neutralizing ***antibody*** to ***IL-13***

results in inhibition of HRS cell proliferation *in vitro*. Because of the potential therapeutic implication of these observations, we examined IL-13 levels in serum from patients with newly diagnosed and relapsed HD and

healthy volunteers. Supernatants from 3 HD derived cell lines (HD-LM2,

L-428, and KMH-2) known to produce IL-13 were used as positive controls.

The sensitivity of the ELISA assay is less than 1.2 pg/ml. As previously reported, all 3 HD cell lines produced IL-13 (range 85-300 pg/ml). In contrast, IL-13 was below the detectable level in sera from 40 healthy

for

the first time that IL-13 levels can be elevated in the serum of patients with HD. Although the number of patients with elevated IL-13 levels is small, this does not rule out the possibility of higher concentrations at the disease site. Our data may serve as the basis for new treatment strategies to explore the potential clinical relevance of IL-13 in patients with HD.

1.26 ANSWER 9 OF 16 WPIIDS (C) 2002 THOMSON DERWENT ACCESSION NUMBER: 2001-080753 [09] - WPIIDS DOC NO CPI: C2001-023298

TITLE: Treating tissue fibrosis and/or inhibiting formation of tissue fibrosis in a mammalian subject, involves administering a pharmaceutical composition comprising IL-17 antagonist.

DERWENT CLASS: B04

INVENTOR(S): COLLINS, M; DONALDSON, D; FITZ, L;

NEBEN, T; WHITTERS, M;

J; WILLS-KARP, M; WOOD, C

PATENT ASSIGNEE(S): (GEMY) GENETICS INST INC; (UYJO) UNIV JOHNS HOPKINS

COUNTRY COUNT: 83

PATENT INFORMATION:

PATENT NO KIND DATE WEEK LA PG

WO 2000078336 A1 20001228 (200109)* EN 72

FR: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT

KE: ES LU MC MW MZ

NE: OA PT SD SE SI SZ TZ UG ZW

W: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE

DK: EE ES FI GB GE

GH: GM HR HU ID IL IS JP KE KG KP KR KZ LZ LK LR LS

LT: LU LV MD MG

MK: MN MW MX NO NZ PI PT RO RU SD SE SG SU SK SL TJ

TM: TR TT UA UG

U: VN YU ZW

AU: 2000057561 A 20010109 (200122)

APPLICATION DETAILS:

PATENT NO KIND APPLICATION DATE

WO 2000078336 A1 WO 2000-US17103 20000621

AU 2000057561 A AU 2000-57561 20000621

FILING DETAILS:

PATENT NO KIND PATENT NO

AU 2000057561 A Based on WO 200078336

PRIORITY APPLN INFO: US 1999-334512 1999-621

AN: 2001-08-0753 [09] - WPIIDS

AB: WO 200078336 A1 PAB: 20010213

NOVELTY: Treating tissue fibrosis and/or inhibiting formation of tissue

fibrosis in a mammalian subject, comprising administering a pharmaceutical

composition (C1) comprising a protein (I), or a composition (C2)

comprising a molecule (II) which is interleukin (IL)-13 or IL-4

antagonist, is new.

(I) comprises a 383 residue amino acid

sequence (I), fully defined in the specification, residues 22-334 or

357-581 of I, a 380 residue amino acid sequence (S2), fully defined in

the specification, amino acids 26-341 or 363-380 of S2, or fragments of

S2, or S2 having a biological activity of IL-13 receptor binding chain:

ACTIVITY: Cytostatic

Mechanism of Action: Inhibitor of tissue fibrosis formation

Claimed:

C57BL/6 WT and IL-4-deficient mice were infected percutaneously with

25 Schistosoma mansoni cercariae. Separate groups of animals were

treated with either sII-13R-alpha 2-Fc or with control-Fc. The treatments began on

week 5, at the start of egg laying, and all animals were sacrificed 8 week

post-infection and examined for several parasitologic and immunologic

parameters. All four groups of mice harbored similar worm burdens, and

there was no significant difference in the number of eggs per gram of liver

between the sII-13R-alpha 2-Fc and control-Fc treated mice.

Conclusion: The results indicate that sII-13R-alpha 2-Fc is effective in

treating tissue fibrosis and/or inhibiting formation of tissue fibrosis in a

mammalian subject, comprising administering a pharmaceutical

composition comprising IL-17 antagonist.

DETAILED DESCRIPTION - Treating tissue fibrosis and/or

inhibiting formation of tissue fibrosis in a mammalian subject, comprising

administering a pharmaceutical composition comprising IL-17 antagonist.

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inhibiting formation of tissue fibrosis in a mammalian subject, comprising

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inhibiting formation of tissue fibrosis in a mammalian subject, comprising

administering a pharmaceutical composition comprising IL-17 antagonist.

DETAILED DESCRIPTION - Treating tissue fibrosis and/or

inhibiting formation of tissue fibrosis in a mammalian subject, comprising

administering a pharmaceutical composition comprising IL-17 antagonist.

DETAILED DESCRIPTION - Treating tissue fibrosis and/or

inhibiting formation of tissue fibrosis in a mammalian subject, comprising

IL-4-deficiencies

resulted in a less significant reduction. The overall results showed that treatment with IL-13R alpha 2 Fc significantly reduced hepatic fibrosis in S mansoni-infected mice.

Mechanism of Action - IL-13 or IL-4 inhibitor antagonist

USE - The method is useful for treating or inhibiting the formation of tissue fibrosis resulting from infection with schistosoma or from healing of a surgical incision wound. Fibrosis affects skin, epididymis, skin, endodermis, muscle, tendon, cartilage, tissues of cardiac, pancreatic, lung, uterine, neural, testis, ovary, adrenal gland, artery, vein, colon, small intestine, biliary tract or gut tissue or more preferably liver tissue (claimed).

Dwg 0.7

126 ANSWER 11 OF 16 WPIDS (C) 2002 THOMSON DFWENTI
ACCESSION NUMBER: 2000-431587 [37] WPIDS
DOC NO: CPI C2000-131254

TITLE: New polynucleotide encoding an interleukin-13 (IL-13) bonding chain of an IL-13 receptor for treating IgE-mediated conditions, such as atopy, asthma, Grave's disease and inflammatory conditions of the lung.

DERWENT CLASS: B04 D16

INVENTOR(S): COLLINS, M; DONALDSON, D; FITZ, L;
NEBEN, T; WHITTIER, M

J; WILLS-KARP, M; WOOD, C

PATENT ASSIGNEE(S): (GEMY) GENETICS INST INC; (UYJO)

UNIV JOHNS HOPKINS

COUNTRY COUNT: 83

PATENT INFORMATION:

PATENT NO. KIND DATE WEEK LA PG

WO 2000036103 A1 20000622 (200037)* EN 60

EW AT BE CH CY DE DK EA ES FR GB GH GM GR IT IT
KE LS LU MC MW NL
OA PA SD SE SZ TZ UG ZW

W AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE
DK EE ES FG GB GE
GH GM HR HU ID IL IS JP KE KG KP KR KZ LC LK LR LS

LTT LV MD MG
MK MN MW MN NO NZ PL PT RO RU SD SE SG SI SK SL TJ
TM TR TT UA UG

UZ VN YU ZW

AU 2000021775 A 20000703 (200046)

EP 1141286 A1 20011010 (200167) EN

R AL AT BE CH CY DE DK ES FR GB GR IF IT LT LU
LV MC MK NI PT
RO SI SE

BF 9916209 A 20011226 (200296)

CN 1352686 A 20020605 (200261)

APPLICATION DETAILS:

PATENT NO. KIND APPLICATION DATE

WO 2000036103 A1 WO 1999-US29493 19991213

AU 2000021775 A AU 2000-21775 19991213

EP 1141286 A1 EP 1999-966166 19991213

BR 9916209 A WO 1999-US29493 19991213

CN 1352686 A CN 1999-815591 19991213

FILING DETAILS

PATENT NO. KIND PATENT NO.

AU 2000021775 A Based on WO 200036103

EP 1141286 A1 Based on WO 200036103

BR 9916209 A Based on WO 200036103

PRIORITY APPLN. INFO. US 998-211335 19981214

AN 2000-431587 [37] WPIDS

AB WO 2000-61-3 A1 PAPB 20000807

NOVELTY - A polynucleotide comprising a nucleotide sequence that encodes:

an interleukin-13 binding chain (IL-13bc) or fragment, of IL-13

receptor;

or new

DEFINITION DESCRIPTION - The polynucleotide comprises a nucleotide sequence that is:

(a) nucleotides 256 to 1404 of a 1525 murine nucleotide sequence, given in the specification;

(b) nucleotides 703 to 1242 of a 1369 human nucleotide sequence, given in the specification;

(c) a variant of (a) or (b) as a result of degeneracy of the genetic code;

(V) amino acids 363 to 380 of (IV); or

(VI) fragments of (I) to (VI) having IL-13 receptor binding chain activity;

(4) a protein produced by (2);

(5) a composition comprising an antibody that reacts with (1);

(6) identifying an inhibitor of IL-13 binding to the IL-13 receptor (II-13R) comprising

(i) combining (2) with IL-12 or a fragment to form a first binding mixture;

(ii) measuring binding between the protein and IL-13 or fragment;

(iii) combining a compound with the protein and IL-13 or fragment

to

form a second binding mixture

(iv) measuring the amount of binding; and

(v) comparing the binding in the first binding mixture with the binding in the second binding mixture, where the compound inhibits

IL-12

binding to IL-13R when there is a decrease in the binding of the second binding mixture;

(7) an inhibitor identified by (6);

(8) inhibiting binding of IL-13 to IL-13R in a mammal comprising administering (7), (3) or (5);

(9) a polynucleotide comprising a nucleotide sequence that encodes

a

peptide or protein with an amino acid sequence of (3);

(10) treating an IL-13-related condition in a mammal by administering

(3) or an IL-13 antagonist;

(11) potentiating IL-13 activity comprising combining a protein with IL-13 activity with (3) and contacting the combination with a cell expressing a chain of IL-13R other than IL-13bc; and

(12) inhibiting interaction of IL-13 with IL-13bc in a mammal by administering IL-13 antagonist.

ACTIVITY - Antiallergic; antiinflammatory; antiasthmatic;

dermatological; immunosuppressive; antithyroid; cytostatic.

Male A/J mice were immunized intraperitoneally and challenged intratracheally with soluble ovalbumin. The allergic phenotype was assessed 4 days after the antigen challenge. Blockade of IL-13 was performed 24 hours before the antigen challenge by systemic administration of soluble IL-13bc-IgGf fusion protein which binds to and

neutralizes IL-13. Challenge of allergen-immunized mice resulted in significant increases in airway responsiveness to acetylcholine. Blockade of IL-13 resulted in complete reversal of the established allergen-induced airway hyper responsiveness, showing that asthma may be treated.

Mechanism of Action - IL-13 inhibitor.

USE - For identifying and producing an IL-13bc protein that can inhibit the binding of IL-13 to an IL-13 receptor and treat an IL-13-related condition such as an IgE-mediated condition, Atopy, allergic conditions, asthma, immune complex diseases, lupus, nephritis, thyroiditis, Grave's disease or inflammatory conditions of the lung can be treated. For potentiating IL-13 activity (all claimed). Cancer may be treated. Macrophage activation is enhanced allowing use in vaccination and treatment of mycobacterial, intracellular organisms, or parasitic infections.

Dwg 0.4

126 ANSWER 12 OF 16 MEDLINE DUPLICATE 4

ACCESSION NUMBER: 199907279 MEDLINE

DOCUMENT NUMBER: 9907279 PubMed ID: 10377189

TITLE: Interleukin-13 is secreted by and stimulates the growth of Hodgkin and Reed-Sternberg cells.

AUTHOR: Kapp U; Yeh W C; Patterson B; Elia A; Kagi D; Ho A;

Hessel A; Lipsword M; Williams A; Mirtsos C; Ite A; Moyle M; Mak J W

CORPORATE SOURCE: Aggen Institute, Ontario Cancer Institute, the Department

of Medical Biophysics, and the Department of Immunology,

University of Toronto, Toronto, Ontario M5G 2C1, Canada

SOURCE: JOURNAL OF EXPERIMENTAL MEDICINE, 1999

Jan 2, 1999;189(1):

1929-46

Journal code: 298-3109R ISSN: 0022-1007

PUB. COUNTRY: United States

DOCUMENT TYPE: Journal Article, (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 1999

ENTRY DATE: Entered STN: 19990806

Last Updated on STN: 19990806

Entered Medline: 19990726

AB - Gene expression patterns can provide vital clues to the pathogenesis of neoplastic diseases. We investigated the expression of 950 genes in

the lymphocyte-like cell line HD-M2 and in Hodgkin and Reed-Sternberg (HRS) cells.

Expression of IL-13 and IL-13R mRNA was measured in HD-M2 cells and in HRS cells. In contrast to normal lymphocytes, HRS cells expressed IL-13 and IL-13R mRNA at levels similar to those found in normal lymphocytes.

Immunocytochemical analysis revealed that HRS cells express IL-13 and IL-13R protein at levels similar to those found in normal lymphocytes.

These findings suggest that HRS cells produce IL-13 and that IL-13 plays an important role in the stimulation of HRS cell growth, possibly by an autocrine mechanism. Modulation of the IL-13 signaling pathway may be a logical objective for future therapeutic strategies.

Showed

that elevated levels of IL-12 were specifically expressed by Hodgkin Reed-Sternberg (HRS) tumor cells. Treatment of a HD-derived cell

line with a neutralizing ***antibody*** to ***IL *** + ***13*** resulted in a dose-dependent inhibition of HRS cell proliferation. These data suggest that H RS cells produce IL-13 and that IL-13 plays an important role in the stimulation of H RS cell growth, possibly by an autocrine mechanism. Modulation of the IL-13 signaling pathway may be a logical objective for future therapeutic strategies.

126 ANSWER 13 OF 16 MEDLINE

DUPLICATE 5

ACCESSION NUMBER: 199933604 MEDLINE

DOCUMENT NUMBER: 9933604 PubMed ID: 10404009

TITLE: A novel IL-1 cytokine stimulates interleukin-6 in human osteoblastic cells.

AUTHOR: Ritala L; Avioli L V

CORPORATE SOURCE: Department of Internal Medicine, Division of Bone and Mineral Diseases, Washington University School of Medicine at Barnes-Jewish Hospital, St. Louis, Missouri 63110, USA.

SOURCE: JOURNAL OF BONE AND MINERAL RESEARCH, (1999) Jul 14 (7)

1096-103

Journal code: 8610640 ISSN: 0884-0431

PUB. COUNTRY: United States

DOCUMENT TYPE: Journal Article, (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 199909

ENTRY DATE: Entered STN: 19991012

Last Updated on STN: 19991012

Entered Medline: 19990928

AB - Rheumatoid arthritis (RA) is an autoimmune disease characterized by heavy lymphocytic infiltration into the synovial cavity, resulting in the secretion of a variety of cytokines which ultimately leads to destruction of joint tissue. Among the infiltrating cells are activated T cells which produce specific cytokines capable of osteoclast progenitor cell expansion, fusion, and activation. Cultures of activated human T cells and

human osteoblasts (hOBs) were used to study the possibility that lymphokines may act on osteoblasts to produce the osteoclastogenic factor interleukin-6 (IL-6). Purified T cells were activated with a combination of anti-CD3 and anti-CD28 antibodies, cocultured with hOBs in direct physical contact or separated by a transwell system, and conditioned media (CM) were assayed for IL-6 production. After a 72 h incubation period, activated T cell-hOB interaction resulted in a 100-fold increase of IL-6 production over basal levels. The immunosuppressant cyclosporine A (CSA) inhibited T cell tumor necrosis factor alpha and IL-6 production but did not inhibit the T cell induction of IL-6 from hOB. Assay of activated T-cell CM on hOB revealed that a soluble factor, not cell contact, was the major inducer of IL-6. The induction of IL-6 mRNA by both activated T cell CM and CSA-treated activated T cell CM was confirmed by Northern blot analysis. Neutralizing ***antibodies*** to ***IL*** + ***13*** and IL-17 did not affect IL-6 production. These findings suggest that activated T cells produce a novel potent, IL-6 inducing factor that may be responsible for the bone loss observed in RA patients.

126 ANSWER 14 OF 16 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1994-433768 CAPLUS

DOCUMENT NUMBER: 121-3318

TITLE: Human interleukin-13 and the gene encoding it

INVENTOR(S): Aversa, Gregorio; Banciere, Jacques; Briere, Francis; Cools, Benjamin G.; Cottman, Robert E.; Culpepper, Janice; Dang, Warren; De Vries, Jan; De Waal, Malety; Rene, et al.

PATENT ASSIGNEE(S): Schering Corp., USA

SOURCE: PCT Int Appl, 136pp

CODEX: P.XND2

DOCUMENT TYPE: Patent

LANG: Eng

FILED: 1994-01-12

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the residues at positions 112, 110, 109, 92, 69, or 66 are mutated to a neutrally charged residue, or one with a charge opposite to the charge of the residue found at that position in native IL-13, provided that the residue at position 13 of the mol. is not neg. charged. The agonists can be used as more potent agents to provoke an effect provided by IL-13.

In particular, the agonists can be used as reagents in the maturation of monocytes into dendrite cells, or to pretreat bone marrow stem cell donors to reduce graft vs. host disease in the recipient of the stem cells. Finally, the invention provides IL-13 receptor binding mol. with affinity for the IL-13 receptor at least about 3 times greater than that exhibited by wild-type IL-13. Also provided are methods and compns. for

specifically delivering an effector mol. to a tumor cell by chimeric mol. comprising the effector mol. and an IL-13 receptor binding mol., and pharmaceutical compns. comprising such chimeric mol.

L25 ANSWER 4 OF 7 MEDLINE DUPLICATE 2

ACCESSION NUMBER: 2001255129 MEDLINE

DOCUMENT NUMBER: 21217071 PubMed ID: 11316662

TITLE: Decreased steroid responsiveness at night in nocturnal asthma. Is the macrophage responsible?

AUTHOR: Kraft M; Hamid Q; Chrousos G P; Martin R J; Leung D Y

CORPORATE SOURCE: Departments of Medicine and Pediatrics,

National Jewish

Medical and Research Center, Division of Pulmonary Sciences and Critical Care Medicine, University of Colorado Health Sciences Center, Denver, Colorado, USA. kraftm@njc.org

CONTRACT NUMBER: AR-41256 (NIAMS)

HI-03343 (C4H1B)

HI-36577 (C4H1B)

RR-00053 (NCRR)

SOURCE: AMERICAN JOURNAL OF RESPIRATORY AND CRITICAL CARE MEDICINE,

(2001 Apr) 163(5):1219-25.

Journal code: 942-642; ISSN: 1073-449X

PUB. COUNTRY: United States

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Abridged Index Medicus Journals, Priority Journals

ENTRY MONTH: 200106

ENTRY DATE: Entered STN: 20010611

Last Updated on STN: 20010611

Entered Medline: 20010607

AB: As peripheral blood mononuclear cells from patients with nocturnal asthma

(NA) exhibit reduced steroid responsiveness at 4:00 A.M. as compared with

4:00 P.M., we hypothesized that NA is associated with increased nocturnal

airway cell expression of GRbeta, an endogenous inhibitor of steroid action. Ten subjects with NA and seven subjects with nonnocturnal asthma

(CNA) underwent bronchoscopy with bronchoalveolar lavage (BAL) at 4:00

P.M. and 4:00 A.M. BAL lymphocytes and macrophages were incubated with

dexamethasone (DEX) at 10(-5) to 10(-8) M. DEX suppressed proliferation of

BAL lymphocytes similarly at 4:00 P.M. and 4:00 A.M. in both groups. However, BAL macrophages from NA exhibited less suppression of IL-8 and

TNF-alpha production by DEX at 4:00 A.M. as compared with 4:00 P.M. ($p < 0.0001$), whereas in the NNA group DEX suppressed IL-8 and

TNF-alpha

production equally at both time points. GRbeta expression was increased at

night only in NA, primarily due to significantly increased expression by BAL macrophages ($p = 0.008$). IL-13 mRNA expression was increased at night,

but only in the NA group and addition of neutralizing

antibodies

to ***IL-4*** + ***IL-13*** reduced GRbeta expression by BAL macrophages.

We conclude that the airway macrophage may be the airway

inflammatory cell

driving the reduction in steroid responsiveness at night in NA, and this function is modulated by IL-13.

L25 ANSWER 5 OF 7 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC

ACCESSION NUMBER: 2002 186429 BIOSIS

DOCUMENT NUMBER: BFLX 200200186429

TITLE: NFkappaB activation in Hodgkin-Reed-Sternberg cells

and

DOCUMENT TYPE: Conference

LANGUAGE: English

AB: The unique cellular background of reactive cells surrounding the rare population of Hodgkin-Reed-Sternberg (HRS) cells in Hodgkin specimen and

the systemic clinical symptom of Hodgkin lymphoma (HL) suggest that cytokines play a role in the pathogenesis of the disease. We have demonstrated previously that interleukin (IL)-13 is strongly expressed and secreted by some Hodgkin-derived cell lines and also expressed by HRS cells in primary tissue. Specific expression of IL-13 could be found in 25%

to 100% of HRS cells in 86% of 36 cases of classical HL tested by *in situ* hybridisation. Furthermore we were able to demonstrate that proliferation

of the IL-13 secreting cell lines HDLM2 and L1236 can be inhibited by treatment with IL-13 neutralizing antibodies. These findings suggest that

an autocrine stimulation by IL-13 might be one step in the multistep transformation process of HL. Another pathway that might play a role for

proliferation and survival of HRS cells is activation of NF-kappaB. As opposed to normal B cells constitutive presence of NF-kappaB1 relA could

be demonstrated in the nucleus of HRS cells. Here we investigate whether

IL-13 signalling and activation of NF kappaB might be linked to each other

in HL. HL-derived cell lines HDLM2 and L1236 were cultured

untrated or in

the presence of different compounds inhibiting IL-13 signalling: IL-13 neutralizing ***antibodies*** (alpha- ***IL-4*** + ***IL-13***); specific antibodies blocking the IL-12/IL-4 receptor (alpha-IL13 IL-4R) and

an IL-4 mutant molecule (IL-4F Y). After 48h of treatment cells were harvested and investigated for nuclear NF-kappaB1 relA by gelshift and

sapar-draft experiments. At the same time, treated cells were also tested for cell proliferation by measurement of (3H)-thymidine uptake. In both cell lines treatment with alpha-IL-13, alpha-IL-13 IL-4R and IL-4RY inhibited

proliferation. In HDLM2 cells neutralization of IL-13, as well as blockade of the IL-13 IL-4R leads to a significant loss of nuclear NF-kappaB1 relA.

In L1236 NF-kappaB activation was not altered by IL-13 neutralization. This study indicates that NF-kappaB1 relA activation may be linked to IL-13 signalling mediated by the IL-13 IL-4R in HL-derived cells.

Proliferation of the cell line L1236 can be inhibited by IL-13 neutralization without inactivation of NF-kappaB1 relA, which suggests

that the proliferative effect of IL-13 on HL-cells might not depend on NF-kappaB activation.

In L1236 NF-kappaB activation was not altered by IL-13 neutralization. This study indicates that NF-kappaB1 relA activation may be linked to IL-13 signalling mediated by the IL-13 IL-4R in HL-derived cells.

Proliferation of the cell line L1236 can be inhibited by IL-13 neutralization without inactivation of NF-kappaB1 relA, which suggests

that the proliferative effect of IL-13 on HL-cells might not depend on NF-kappaB activation.

L25 ANSWER 6 OF 7 MEDLINE DUPLICATE 3

ACCESSION NUMBER: 199333604 MEDLINE

DOCUMENT NUMBER: 9933604 PubMed ID: 10404009

TITLE: A novel T cell cytokine stimulates interleukin-6 in human osteoblastic cells

AUTHOR: Rifas L; Avioli L V

CORPORATE SOURCE: Department of Internal Medicine, Division of Bone and

Mineral Diseases, Washington University School of Medicine at Barnes-Jewish Hospital, St. Louis, Missouri 63110, USA.

SOURCE: JOURNAL OF BONE AND MINERAL RESEARCH, (1999 Jul) 14 (7)

1026-1033.

Journal code: 8610640 ISSN: 0884-0431.

PUB. COUNTRY: United States

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 199909

ENTRY DATE: Entered STN: 19990102

Last Updated on STN: 19990102

Entered Medline: 19990928

AB: Rheumatoid arthritis (RA) is an autoimmune disease characterized by a

heavy lymphocytic infiltration into the synovial cavity, resulting in the secretion of a variety of cytokines which ultimately leads to destruction of joint tissue. Among the infiltrating cells are activated T cells which produce specific cytokines capable of osteoclast progenitor cell expansion, fusion, and activation. Cultures of activated human T cells and

human osteoblasts (hOBs) were used to study the possibility that lymphokines may act on osteoblasts to produce the osteoclastogenic factor

interleukin-6 (IL-6). Partially activated T cells were activated with a combination of

IL-13 and IL-17 did not affect IL-6 production. These findings suggest that activated T cells produce a novel, potent, IL-6 inducing factor that may be responsible for the bone loss observed in RA patients

L25 ANSWER 7 OF 7 MEDLINE

ACCESSION NUMBER: 95137604 MEDLINE

DOCUMENT NUMBER: 95137668 PubMed ID: 7530690

TITLE: IL-13 has only a subset of IL-4-like activities on B chronic lymphocytic leukaemia cells

AUTHOR: Fluckiger A C; Breuer E; Zurawski G; Bridon J M; Baruchel S

C

CORPORATE SOURCE: Schering-Plough, Laboratory for Immunological Research, Dardilly, France

SOURCE: IMMUNOLOGY, (1994 Nov) 83 (3):397-403. Journal code: 0374-72 ISSN: 0019-2805.

PUB. COUNTRY: ENGLAND: United Kingdom

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 199503

ENTRY DATE: Entered STN: 19950314

Last Updated on STN: 19960129

Entered Medline: 19950302

AB: The recently described interleukin-13 (IL-13) has been shown to share many

of the effects of IL-4 on normal B cells, including growth-promoting activity and induction of CD23. In this study, we compared the effects of

IL-13 and IL-4 on B chronic lymphocytic leukaemias (B-CLL) cells.

After

anti-CD40 activation, both IL-13 and IL-4 promoted the DNA synthesis of

B-CLL cells and increased the recovery of viable cells. The time kinetic of the proliferative response of B-CLL cells to IL-13 or IL-4 were superimposable and showed the long-lasting effect of both cytokines.

As on

normal B cells, both IL-4 and IL-13 synergized with IL-10 to enhance B-CLL

DNA synthesis. Moreover, IL-13, like IL-4, was able to increase CD23 expression on anti-CD40-activated leukaemic B cells. The CD23 up-regulation and the DNA synthesis induced by IL-13 on anti-CD40-activated B-CLL cells, were significantly reduced when

B-CLL cells were cultured with anti-IL-4 receptor monoclonal antibody, suggesting a common pathway for IL-13 and IL-4 signalling. However, after

cross-linking of surface IgM, IL-4 strongly inhibited the IL-2-induced DNA synthesis of B-CLL cells, whereas IL-13 did not inhibit IL-2-driven proliferation of anti-IgM activated B-CLL cells. Furthermore, while IL-4 strongly up-regulated the expression of CD23 on anti-IgM-activated leukaemic B cells, IL-13 only marginally increased it. Finally, IL-13, in contrast to IL-4, did not prevent the entry of B-CLL cells into apoptosis.

Thus IL-13 and IL-4 display comparable effects on anti-CD40-activated B-CLL cells which are blocked by anti-IL-4 receptor (IL-4R) monoclonal

antibodies. However, ***IL-4*** + ***IL-13*** -dependent effects

are absent or inefficient in non-activated or anti-IgM-activated B-CLL cells. This suggests that such cells may lack functional IL-13 receptors, though IL-13R and IL-4R on B-CLL cells share a common component.

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L24 ANSWER 1 OF 11 MEDLINE DUPLICATE 1

ACCESSION NUMBER: 900167427 MEDLINE

DOCUMENT NUMBER: 2 166040 PubMed ID: 1269532

TITLE: Differential in vitro effects of IL-4, IL-10, and IL-13 on proinflammatory cytokine production and fibroblast proliferation in rheumatoid synovium

AUTHOR: Morita Y; Yamamoto M; Kawashima M; Aita T; Harada S

Okamoto H; Inoue H; Makino H

CORPORATE SOURCE: Department of Medicine II, Okayama University Medical School, Japan

SOURCE: RHEUMATOLOGY INTERNATIONAL, (2001 Feb) 20 (2):49-54

Journal code: 8206885 ISSN: 0172-8172

PUB. COUNTRY: Germany: Germany, Federal Republic of

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

chronic arthritic (RA) patients. Partially activated T cells were activated with a combination of

IL-4, IL-10, and IL-13. The production of proinflammatory cytokines and cytokine-mediated fibroblast growth: IL-4, IL-10, and IL-13

was measured by ELISA. The results show that the production of IL-13 was significantly higher than that of IL-4 and IL-10 in RA patients. The production of IL-13 was significantly higher than that of IL-4 and IL-10 in RA patients. The production of IL-13 was significantly higher than that of IL-4 and IL-10 in RA patients.

TNF-alpha reduction. The IL-4 receptor antagonist was enhanced by IL-4 and
IL-13, but only slightly enhanced by IL-10. Spontaneous
interferon-gamma
secretion was diminished by IL-4 and IL-10 but not by IL-13. Addition
of

anti-IL-10 neutralizing antibody to RA synovial tissue cells resulted in a substantial increase in IL-1beta and TNF-alpha levels, whereas neither anti-IL-4 nor anti-***IL-4*** + ***IL-13*** ***antibody*** had a significant effect. IL-1beta-stimulated proliferation of RA synovial fibroblast cell lines was inhibited by IL-4 and IL-13, but not by IL-10. IL-4 was over tenfold more effective than IL-13. These results suggest that IL-4, IL-10 and IL-13 all have the therapeutic potential to regulate the disease activity mediated by proinflammatory cytokines in RA, but each

cytokine may have different potencies.

124. ANSWER 2 OF 11 WPIDS (C) 2002 THOMSON DERWENT
ACCESSION NUMBER: 2000-431587 [37] WPIDS
DOC NO CPI: C2000-131254

TITLE: New polynucleotide encoding an interleukin-13 (IL-13)
binding chain of an IL-13 receptor for treating
IgE-mediated conditions, such as atopy, asthma, Grave's¹
disease and inflammatory conditions of the lung.

DERWENT CLASS: B04 D16

INVENTOR(S): COLLINS, M; DONALDSON, D; FITZ, L;
NEBEN, T; WHITTIER, M

J. WILLES-ARP, M; WOOD, C

PATENT ASSIGNEE(S): (GEMY) GENETICS INST INC, (UYIO)

UNIV JOHNS HOPKINS

COUNTRY CODE: 83

PATENT INFORMATION:

PATENT NO. KIND DATE WEEK TA PG

WO 2000036103 A1 20000622 (200037)* IX 60

EPU: AT BE CH CY DE DK EA ES FR GB GR GM GR IE IT

KE IS LU MU MW NL

OA PT SD SE SI SZ TZ UG ZW

W: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE

DK FR ES FG GB GE

GH GM HR HU IEL IS JP KE KG KP KP KZ LCT KU LS

LT LU LV MD MG

MK MT MW MX NO NZ PI PT RO RU SD SE SG SI SE SL TJ

TM TT UU UU UU

UZ VN YL ZW

AU 2000021775 A 20000703 (200046)

EP 1141286 A1 20011010 (200167) EN

R: AL AT BE CH CY DE DK ES FR GB GR IE IT LU TT LU

LV MC MU PT

RO SE SI

BR 9916209 A 20011226 (200206)

CN 1352686 A 20020605 (200261)

APPLICATION DETAILS:

PATENT NO. KIND APPLICATION DATE

WO 2000036103 A1 WO 1999-US29493 19991213

AU 2000021775 A AU 2000-2175 19991213

EP 1141286 A1 EP 1999-966166 19991213

WO 1999-US29493 19991213

BR 9916209 A BR 1999-16209 19991213

WO 1999-US29493 19991213

CN 1352686 A CN 1999-815591 19991213

FILING DETAILS:

PATENT NO. KIND PATENT NO.

AU 2000021775 A Based on WO 200036103

EP 1141286 A1 Based on WO 200036103

BR 9916209 A Based on WO 200036103

PRIORITY APPN'S INFO: US 1998-21-335 19981214

AN: 2000-43-587177 WPIDS

AB: WO 2000036103 A1 PAB 20000807

N: 3311 IV: A polynucleotide comprising a nucleotide sequence that encodes an interleukin-13 binding chain (IL-13bc) or fragment, of IL-13 receptor, is new

DETAILED DESCRIPTION: The polynucleotide comprises a nucleotide sequence that is:

(a) nucleotides 256 to 1404 of a 1525 murine nucleotide sequence, given in the specification,
(b) nucleotides 101 to 1242 of a 1369 human nucleotide sequence, given in the specification,

(III) amino acids 257 to 83 of (1),
(IV) 380 amino acids, given in the specification,
(V) amino acids 29 to 341 of (IV),
(VI) amino acids 367 to 380 of (IV), or
(VII) fragments of (I) to (VI) having IL-13 receptor binding chain activity;

(4) a protein produced by (2),
(5) a composition comprising an antibody that reacts with (3),
(6) identifying an inhibitor of IL-13 binding to the IL-13 receptor (IL-13R) comprising:

(i) combining (2) with IL-13 or a fragment to form a first binding mixture;

(ii) measuring binding between the protein and IL-13 or fragment;

(iii) combining a compound with the protein and IL-13 or fragment to

form a second binding mixture;

(iv) measuring the amount of binding, and

(v) comparing the binding in the first binding mixture with the binding in the second binding mixture, where the compound inhibits IL-13

binding to IL-13R when there is a decrease in the binding of the second binding mixture;

(7) an inhibitor identified by (6);
(8) inhibiting binding of IL-13 to IL-13R in a mammal comprising administering (7), (3) or (5).

(9) a polynucleotide comprising a nucleotide sequence that encodes

a peptide or protein with an amino acid sequence of (3),
(10) treating an IL-13-related condition in a mammal by administering:

(3) or an IL-13 antagonist;

(11) potentiating IL-13 activity comprising combining a protein with IL-13 activity with (3) and contacting the combination with a cell expressing a chain of IL-13R other than IL-13bc; and

(12) inhibiting interaction of IL-13 with IL-13bc in a mammal by administering IL-13 antagonist.

ACTIVITY: Antiallergic, antiinflammatory, antiallergic, dermatological, immunosuppressive, antithyroid; cytostatic.

Maize A/J mice were immunized intraperitoneally and challenged intratracheally with soluble ovalbumin. The allergic phenotype was assessed 4 days after the antigen challenge. Blockade of IL-13 was performed 24 hours before the allergen challenge by systemic administration of soluble IL-13bc-IgG fusion protein which binds to and

neutralizes IL-13. Challenge of allergen-immunized mice resulted in significant increases in airway responsiveness to acetylcholine.

Blockade of IL-13 resulted in complete reversal of the established allergen-induced d

airway hyper responsiveness, showing that asthma may be treated.

Mechanism of Action - IL-13 inhibitor.

USE: For identifying and producing an IL-13bc protein that can inhibit the binding of IL-13 to an IL-13 receptor and treat an IL-13-related condition such as an IgE-mediated condition. Atopy, allergic conditions, asthma, immune complex diseases, lupus, nephritis, thyroiditis, Graves' disease or inflammatory conditions of the lung can

be treated. For potentiating IL-13 activity (all claimed). Cancer may be treated. Macrophage activation is enhanced allowing use in vaccination and treatment of mycobacterial, intracellular organisms, or parasite infections.

Dwg 0.4

124. ANSWER 3 OF 11 MEDLINE DUPLICATE 2

ACCESSION NUMBER: 2000454825 MEDLINE

DOCUMENT NUMBER: 20363565 PubMed ID: 10903803

TITLE: Interleukin-13 and IgE production in rat experimental schistosomiasis

AUTHOR: Cetrc C, Pierrot C, Marie E, Capron M, Capron A;

Khalife J

CORPORATE SOURCE: Institut Pasteur de Lille, INSERM U-167, 1

rue du Dr

Camille, BP 245, 59019 Lille Cedex, France

SOURCE: EUROPEAN CYTOKINE NETWORK, (2000 Jun 11)

(2) 241-49

JOURNAL CODE: J00870 ISSN: 1148-5493

PUB COUNTRY: France

DOCUMENT TYPE: Journal Article, JOURNAL ARTICLE

LANG AGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 200009

ENTRY DATE: Entered STN: 20001005

Last Updated on STN: 20001005

Entered Medline: 20000925

AB: We have previously demonstrated in rat experimental schistosomiasis an

upregulation of IL-4 expression at the mRNA and protein levels which could

contribute to parasite-induced IgE production observed during

antibodies showed significant decrease in the IgE levels. Moreover, administration of IL-13 enhanced total IgE levels. These results

demonstrate the implication of IL-4 and IL-13 in vivo in IgE production, and provide a relevant animal model for a better understanding of the role of IL-4 and IL-13 in humans.

124. ANSWER 4 OF 11 EMBASE COPYRIGHT 2002 ELSEVIER SCI BV

ACCESSION NUMBER: 2001097379 EMBASE

TITLE: Differential in vitro effects of IL-4, IL-10, and IL-13 on proinflammatory cytokine production and fibroblast proliferation in rat synovium

AUTHOR: Morita Y, Yamamura M, Kawashima M, Aita T, Harada S,

Okanoto H, Inoue H, Makino H

CORPORATE SOURCE: M. Yamamura, Department of Medicine III, Okayama University Medical School, 2-5-1 Shikata-cho, Okayama 700-8558, Japan.

yamamura@med.okayama-u.ac.jp

SOURCE: Rheumatology International, (2000) 20(2) 49-54.

Refs: 38

ISSN: 0172-8172 CODEN: RHINDE

COUNTRY: Germany

DOCUMENT TYPE: Journal Article

FILE SEGMENT: 026 Immunology, Serology and Transplantation

031 Arthritis and Rheumatism

037 Drug Literature Index

LANGUAGE: English

SUMMARY LANGUAGE: English

AB: The purpose of this study was to compare the potential of interleukin-4 (IL-4), IL-10, and IL-13 to interrupt two major inflammatory pathways

in rheumatoid arthritis (RA), i.e., overexpression of proinflammatory cytokines and cytokine-mediated fibroblast growth. IL-4, IL-10, and IL-13

were all able to significantly inhibit the production of IL-1-beta, tumor necrosis factor-alpha (TNF-alpha), IL-6, and IL-8 by freshly isolated RA synovial tissue cells; IL-10 was most effective in terms of IL-1-beta and TNF-alpha reduction. The IL-1 receptor antagonist was enhanced by IL-4 and IL-13, but only slightly enhanced by IL-10. Spontaneous interferon-gamma secretion was diminished by IL-4 and IL-10 but not by IL-13. Addition of anti-IL-10 neutralizing antibody to RA synovial tissue

cells resulted in a substantial increase in IL-1 beta, and TNF-alpha levels, whereas neither anti-IL-4 nor anti-***IL-4*** + ***IL-13***

antibody had a significant effect. IL-1-beta-stimulated

proliferation of RA synovial fibroblast cell lines was inhibited by IL-4 and IL-13, but not by IL-10; IL-4 was over tenfold more effective than IL-13. These results suggest that IL-4, IL-10, and IL-13 all have the therapeutic potential to regulate the disease activity mediated by proinflammatory cytokines in RA, but each cytokine may have different potencies.

124. ANSWER 5 OF 11 MEDLINE DUPLICATE 3

ACCESSION NUMBER: 97350814 MEDLINE

DOCUMENT NUMBER: 97350814 PubMed ID: 9207190

TITLE: Expression of recombinant rat interleukin-13 (IL-13) and generation of a neutralizing rat IL-13 antiserum.

AUTHOR: Lakkis F G, Cruet F N, Nassar G M, Badr K F, Pascual D W

CORPORATE SOURCE: Renal Division, Emory University School of Medicine and

Veterans Affairs Medical Center, Atlanta, Georgia 30333, USA

USA; Telakakra.mor.edu

CORPTEAULT NUMBER: AI40288 (NIH)

SOURCE: BIOCHEMICAL AND BIOPHYSICAL RESEARCH COMMUNICATIONS, (1997)

Jan 27) 23(1):23-32

Journal code: 037251 ISSN: 0006-291X

PUB COUNTRY: United States

DOCUMENT TYPE: Journal Article, JOURNAL ARTICLE

LANG AGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 1997-07

ENTRY DATE: Entered STN: 19970805

Last Updated on STN: 19970805

Entered Medline: 19970724

AB: Using baculoviral and bacterial systems, we expressed biologically active

recombinant rat IL-13 and generated neutralizing rat IL-13 antiserum.

Recombinant rat IL-13 produced by baculovirus-infected insect cells stimulated proliferation of IL-4 transduced cell line and induced

IL-4 and IL-13 receptor expression in rat synovial fibroblasts.

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IL-4 and IL-13 receptor expression

124 ANSWER 6 OF 11 MEDLINE DUPLICATE 4
ACCESSION NUMBER: 9722231 MEDLINE
DOCUMENT NUMBER: 9722231 PubMed ID: 9069451
TITLE: Interleukin-13 inhibits cytokine secretion by blood monocytes from patients with IgA nephropathy
AUTHOR: Matsumoto K
CORPORATE SOURCE: Second Department of Internal Medicine, Nihon University

School of Medicine, Tsubaki-ku, Tokyo, Japan
SOURCE: NEPHRON, (1997) 75 (3) 295-302.
Journal code: 0331777 ISSN: 0028-2766

PUB COUNTRY: Switzerland
DOCUMENT TYPE: Journal Article, (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 199707

ENTRY DATE: Entered STN: 19970724

Last Updated on STN: 19970724

Entered Medline: 19970715

AB In this study we have examined the effects of recombinant human interleukin (IL)-13 on peripheral blood monocytes (PBM) from patients with

IgA nephropathy (IgAN). Significantly increased spontaneous and lipopolysaccharide (LPS)-stimulated secretion of tumor necrosis factor-alpha (TNF) and IL-8 was determined in PBM cultures of IgAN patients compared to those of normal controls. In the present study, IL-13

inhibited the spontaneous as well as the LPS-stimulated cytokine secretion

of PBM in IgAN. Significant inhibitory effect of IL-13 was observed in cultures of PBM from IgAN patients as well as from normal persons.

When both LPS and anti- ***IL*** - ***13*** ***antibody*** were added

together to the PBM, a further increase of LPS-enhanced secretion of cytokines occurred. Taken together, these results indicate that IL-13 down-regulates the secretion of TNF and IL-8 from IgAN PBM.

124 ANSWER 7 OF 11 MEDLINE DUPLICATE 5

ACCESSION NUMBER: 998004375 MEDLINE

DOCUMENT NUMBER: 98004375 PubMed ID: 9346389

TITLE: Interleukin-10 and interleukin-13 synergize to inhibit vascular permeability factor release by peripheral blood mononuclear cells from patients with lipid nephrosis.

AUTHOR: Matsumoto K; Oh H; Kannanose K

CORPORATE SOURCE: 2nd Department of Internal Medicine, Nihon University

School of Medicine, Tokyo, Japan

SOURCE: NEPHRON, (1997) 71 (2) 212-5

Journal code: 0331777 ISSN: 0028-2766

PUB COUNTRY: Switzerland
DOCUMENT TYPE: Journal Article, (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 199711

ENTRY DATE: Entered STN: 1998-109

Last Updated on STN: 1998-099

Entered Medline: 19971126

AB It has been proposed that a vascular permeability factor (VPF) is involved

in the pathogenesis of lipid nephrosis (LN). There is now increasing evidence that interleukin-10 (IL-10) and interleukin-13 (IL-13) have regulatory effect on cytokine production by activated macrophages. These

results prompted us to study the effects of recombinant human IL-10 and IL-13 on VPF secretion in LN. In the present study, we demonstrate that

the regulatory cytokines IL-10 and IL-13 are potent inhibitors of the VPF.

The activity of activated peripheral blood mononuclear cells. Each cytokine was found to suppress VPF secretion in a dose-dependent fashion.

More importantly, the combination of the cytokines was found to give a potent

synergistic suppression of VPF by concanavalin A activated peripheral blood mononuclear cells from patients with LN. When both anti-IL-10 and

anti- ***IL*** - ***13*** ***antibodies*** were added together to

the peripheral blood mononuclear cells, a further increase of

concanavalin A enhanced secretion of VPF occurred. These data establish IL-10 and

IL-13 as potent inhibitors of VPF activity and suggest their utility in controlling cellular VPF mediated responses such as occur in LN patients with nephrotic syndrome.

LANGUAGE: English
FILE SEGMENT: Priority Journals, AIDS
ENTRY MONTH: 199701
ENTRY DATE: Entered STN: 19970128
Last Updated on STN: 19970128
Entered Medline: 19970114

AB IgE isotype switching of human B cells requires physical interaction of T and B cells via surface molecules, and either IL-4 or IL-13 secreted by

T cells. In this study we analyzed the role of IL-4 versus IL-13 in IgE production in atopy. We found that peripheral blood mononuclear cells (PBMC) from atopic individuals but not from nonatopic subjects secreted

IgE without addition of IL-4 or IL-13, if T and B cell were simultaneously activated by anti-CD3 mAb and soluble CD40L respectively.

IgE production by atopic PBMC was dependent on endogenously secreted IL-4 and IL-13, since it could be blocked by a combination of anti-IL-4 plus anti- ***IL*** - ***13*** ***antibodies***. No differences in the

B cell compartment of nonatopics and atopes were detectable, since PBMC from both donor populations secreted comparable amounts of IgE, if only

the B cells were activated by soluble CD40L plus either exogenous IL-4 or IL-13. Further phenotypic analysis of T cells from atopes revealed that activated CD4+45RO+ secreted IL-4 but no IL-13, whereas

CD4+45RO- memory T cells secreted low amounts of IL-4, but large amounts of IL-13. Accordingly, prolonged activation of native CD4+45RO+ T cells in vitro induced expression of CD45RO, and strongly favored secretion of IL-13

rather than IL-4. Addition of exogenous IL-4 during activation further increased both IL-4 and IL-13 production to a similar degree. However, the potential of CD4 T cells from atopes to deliver contact-dependent activation signals to B cells and to induce IgE production (in the absence

of soluble CD40L) increased with prolonged activation, and coincided with IL-13 rather than IL-4 production. Under similar conditions, CD8 effector

cells secreted IL-13 but no IL-4, did not express CD40L, and could not help IgE production by B cells. These results suggest that, in atopy, persistently stimulated CD4+45RO+ memory effector T cells provide contact-dependent activation signals to B cells, and that these cells may induce IgE switching largely via secretion of IL-13.

124 ANSWER 9 OF 11 MEDLINE DUPLICATE 7

ACCESSION NUMBER: 96256149 MEDLINE

DOCUMENT NUMBER: 96256149 PubMed ID: 8675229

TITLE: In vivo treatment with anti-interleukin-13 antibodies significantly reduces the humoral immune response against oral immunogen in mice.

AUTHOR: Bost K L; Holtot R H; Cam T K; Clements J D

CORPORATE SOURCE: Department of Microbiology and Immunology, Tulane University Medical Center, New Orleans, LA 70112, USA

CONTRACT NUMBER: AI28835 (NIHAI)

SOURCE: IMMUNOLOGY, (1996 Apr) 87 (4) 633-41.

Journal code: 0374672 ISSN: 0019-2865

PUB COUNTRY: ENGLAND United Kingdom

DOCUMENT TYPE: Journal Article, (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 199608

ENTRY DATE: Entered STN: 19960822

Last Updated on STN: 19960822

Entered Medline: 19960809

AB Interleukin-13 (IL-13) is a cytokine which significantly enhances the proliferation and differentiation of B lymphocytes. We therefore evaluated its role in the formation of a humoral immune response in vivo. Upon oral immunization with the B subunit of Escherichia coli heat-labile enterotoxin (LT-B), rapid up-regulation of IL-13 mRNA expression in the

mesenteric lymph nodes of LT-B-injected mice occurred. This result suggested that IL-13 might be involved in the formation of a mucosal antibody response against LT-B if this cytokine was in fact secreted. To test this possibility, the coding region for murine IL-13 was cloned into the pET1G-1 expression vector. Recombinant murine IL-13 was

purified from E. coli lysates and used as an immunogen to produce polyclonal anti- ***IL*** - ***13*** ***antibodies***. Cross-reactivity with RAII B cell receptors on such cells. This conclusion was also supported by the analysis of IL-13 and anti- ***IL*** - ***13*** ***antibodies*** to affect the growth of malignant B cells. Taken together, these results show that both malignant and EBV-transformed B lymphocytes, either

13

antibody demonstrated decreased expression of IL-4 and IL-13 mRNA and decreased IL-4 secretion when compared to controls. Together these results demonstrate an important role for IL-13 in the formation of a humoral immune response at mucosal surfaces.

124 ANSWER 10 OF 11 MEDLINE DUPLICATE 8

ACCESSION NUMBER: 95339858 MEDLINE

DOCUMENT NUMBER: 95339858 PubMed ID: 7614976

TITLE: Involvement of interleukin (IL)-13, but not IL-4, in spontaneous IgE and IgG4 production in nephrotic syndrome.

AUTHOR: Kinata H; Fujimoto M; Furusho K

CORPORATE SOURCE: Department of Pediatrics, Kyoto University Hospital, Japan

SOURCE: EUROPEAN JOURNAL OF IMMUNOLOGY, (1995 Jun 25) 25 (6) 1497-501

Journal code: 1273201 ISSN: 0014-2980

PUB COUNTRY: GERMANY Germany, Federal Republic of

DOCUMENT TYPE: Journal Article, (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 199508

ENTRY DATE: Entered STN: 19950905

Last Updated on STN: 19950905

Entered Medline: 19950822

AB Nephrotic syndrome (NS) is a renal disease characterized by proteinuria

and hypoalbuminemia. In NS patients without any allergic disease, serum

IgE and IgG4 levels were selectively increased, and peripheral blood mononuclear cells (MNC) spontaneously produced IgE and IgG4. T cells

produced interleukin (IL)-13 spontaneously, and B cells constitutively expressed IL-13 receptors (IL-13R). In addition, T cells stimulated surface IgE-negative (sIgE-) and sIgG4- B cells to produce IgE and IgG4,

respectively, and IgE and IgG4 production was specifically blocked by anti- ***IL*** - ***13*** ***antibody*** (Ab). MNC from atopie

dermatitis (AD) patients also produced IgE and IgG4 spontaneously. However, in AD patients, T cells spontaneously produced IL-4, but not IL-13, and B cells constitutively expressed IL-4R, but not IL-13R. T cells

stimulated sIgE- and sIgG4- B cells to produce IgE and IgG4, respectively,

and the production was specifically blocked by anti-IL-4 Ab. On the other

hand, sIgE- and sIgG4- B cells from both NS and AD patients spontaneously

produced IgE and IgG4, respectively, and this production was not affected

by T cells, anti-IL-4 Ab, or anti-IL-13 Ab. These results indicate that IL-13 is involved in the enhanced production of IgE and IgG4 in NS. While IL-4 is involved in these responses in AD.

124 ANSWER 11 OF 11 MEDLINE DUPLICATE 9

ACCESSION NUMBER: 95244773 MEDLINE

DOCUMENT NUMBER: 95244773 PubMed ID: 7727691

TITLE: Interleukin-13 gene expression by malignant and EBV-transformed human B lymphocytes.

AUTHOR: Fiori R; Vita N; Raphael M; Minty A; Maillet M C; Cremon M

C; Caput D; Biberfeld P; Ferrara P; Galanand P; +

CORPORATE SOURCE: INSERM U131, Clamart, France

SOURCE: EUROPEAN CYTOKINE NETWORK, (1994 Nov-Dec) 5(6) 593-600

Journal code: 9100879 ISSN: 1148-5493

PUB COUNTRY: France

DOCUMENT TYPE: Journal Article, (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journal

ENTRY MONTH: 199506

ENTRY DATE: Entered STN: 19950608

Last Updated on STN: 19980206

Entered Medline: 19950604

AB Expression of the IL-13 gene in malignant tissues from 26 human B cell

lymphoid malignancies was analyzed by reverse transcriptase-polymerase

chain reaction (RT-PCR). A positive signal was detected in 16 cases, which

included high grade B lymphomas, follicular lymphomas and B cell chronic

lymphocytic leukemias. IL-13 mRNA was also detected in the 9 malignant B cell lines and in the 6 lymphoblastic cell lines tested, as well as in

as

well as on the in vivo behaviour of B lymphoid malignancies

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<u>L8</u>	hilton-douglas.in.	0	<u>L8</u>
<u>L7</u>	nicola-nicos.in.	0	<u>L7</u>
<u>L6</u>	wilson-tracy.in.	0	<u>L6</u>
<u>L5</u>	L1 adjn10 antibod\$3	0	<u>L5</u>
<u>L4</u>	L1 same antibod\$3	94	<u>L4</u>
<u>L3</u>	L1 with antibod\$3	40	<u>L3</u>
<u>L2</u>	L1 and antibod\$3	440	<u>L2</u>
<u>L1</u>	il-13 or il 13 or interleukin1-13 or interleukin 13	480	<u>L1</u>

END OF SEARCH HISTORY